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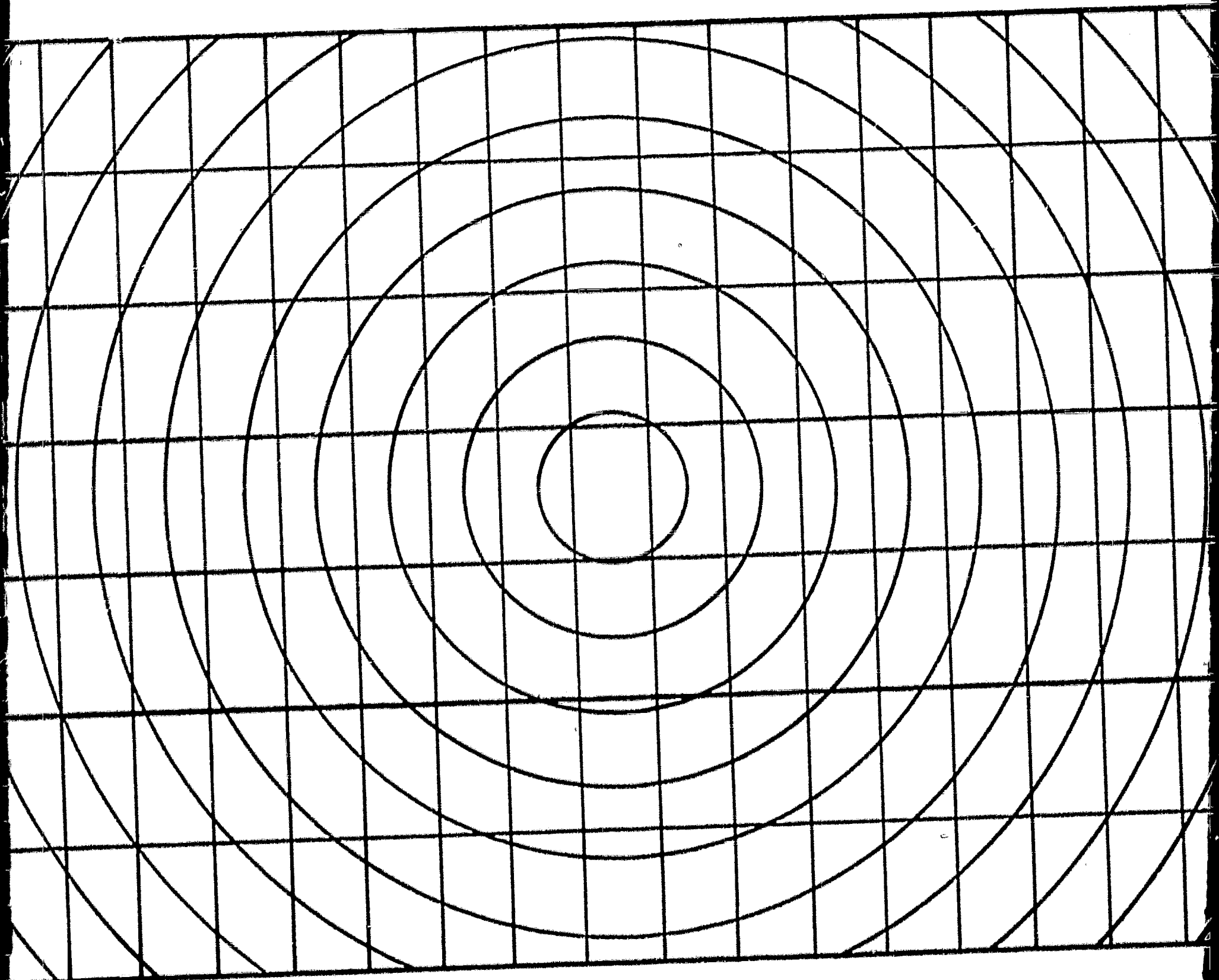
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Identifiers-*Seminar on Statistics in State Vocational Rehabil

This seminar was designed for State Vocational Rehabilitation agency managers, who are not professional statisticians, to provide them with an awareness of some of the more easily constructed and useful tabulations of agency data. The 3-day seminar included 39 participants from seven states, Guam, and The Vocational Rehabilitation Administration. The intense and concerted emphasis on cost effectiveness and cost benefits analysis makes it necessary for the state to build a competent statistical system to provide meaningful data for the determination of content through proper reporting and collection techniques, analysis, dissemination, application, and follow-through. Some of the statistical reports discussed during the seminar include the referral caseload, the active case load, length of time to close cases, historical caseload relationships, acceptance rates by source of referral, and rehabilitation rates by source of referral. Discussion effectively revealed many of the strengths and weaknesses in program operations, and provided a means for measuring the effectiveness of agency policy, program development, and training needs. (HC)

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STATISTICS IN VOCATIONAL REHABILITATION



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STATISTICS
IN
VOCATIONAL REHABILITATION

San Francisco State College
San Francisco, California

Sponsored By

Vocational Rehabilitation Administration
Division of Statistics and Studies
Washington, D. C.

67-132M

**PROCEEDINGS OF A SEMINAR
ON THE USE OF STATISTICS IN
STATE VOCATIONAL REHABILITATION AGENCIES**

San Francisco State College

at

San Francisco, California

November 28 - 30, 1966

Sponsored By

**Vocational Rehabilitation Administration
Washington, D. C.**

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Introduction

This report describes the proceedings of a seminar designed to acquaint the personnel of the State Vocational Rehabilitation agencies with some of the uses of statistics as a management tool. The seminar was conducted under the auspices of the San Francisco State College in San Francisco, on November 28-30, 1966. The discussion materials and discussion leadership were furnished by the Division of Statistics and Studies and the Regional Staff of the Vocational Rehabilitation Administration.

This publication consists of a short combined summary of the major comments and recommendations, the agendas, and the specific training materials used at the seminar

In 1960, an institute on the "Role of Statistics in State Vocational Rehabilitation Agencies" was conducted at Brandeis University. Then, as now, it was felt that the role of statistics needed to be emphasized in program analysis and planning, in staffing, and in organization structuring. At that time there was a feeling that staff members responsible for collecting statistical data and providing its interpretation did not fully understand the function of the statistician; that far better and more effective use could be made of statistical data for program planning, budget preparation, etc.; and that additional time, space, and equipment were needed to perform the statistical functions adequately.

There is an intense and concerted emphasis today on cost effectiveness and cost-benefits analysis as a tool for effective management of vocational rehabilitation programs. Planning of vocational rehabilitation programs on a State and local basis is becoming universal. Because of these emphases, there is a pressing need for a good statistical program in each State agency. The State must build a competent statistical system which can provide meaningful data, for the determination of content through proper reporting and collection techniques, analysis, dissemination, application, and follow through. Also, State statistical programs require more emphasis on the relatively neglected areas of statistics relating to systems, procedure, operations, data processing, and the like.

For this reason, the seminar was designed for State agency managers who are not professional statisticians, to provide them with an awareness of some of the more easily constructed and useful tabulations of agency data. Discussion of the data effectively revealed many of the strengths and weaknesses in program operations, and provided a means for measuring the effectiveness of agency policy, program development, and training needs. We feel that the presentation led the participants to a greater awareness of the many uses of statistics, their effectiveness in quantifying performance, and the benefits which can accrue to the State Director who provides himself with competent statistical assistance.

The Vocational Rehabilitation Administration acknowledges the splendid support given to its staff by the San Francisco State College.

Summary of Major Observations of the San Francisco Statistical Seminar

Hunch, intuition, and guesswork no longer play the role they once did in managing the agency of years past. Statistics are now needed for sound program management and help to put a finger on the pulse of the caseload within an agency. Statistical information is now much more readily available with the advent of ADP systems, generally on a monthly basis.

While a counselor may make only a minimal use of statistics, usually in an informational context, a much greater use of statistics is made on the supervisory or managerial level. The amount or type of statistical data required is dependent on who will be using the information, and the purpose. An agency director may not have an interest in seeing data relating individual counselors. In turn, data on an agency level alone would be of little value to a counselor.

Experienced rehabilitation personnel should be willing to analyze the data readily available to them, not relying solely on the interpretations of the statistician. Statistical tables are indicative of what is being done by individual counselors or by agencies. If there are differences in the data; managerial, supervisory, or counselor personnel should know the reason or be willing to find the reason for the differences.

A master list of the counselor's caseload may be beneficial both to the counselor and his supervisor. A caseload review such as this is most useful, usually on a monthly basis. Items included in such a list might be the length of time a client was in the various statuses, the client's disability, and areas of employment history.

When analyzing statistical tables, one must be prepared for the data to supply information other than what one desires to hear. Data must be used to stimulate questions and not just draw conclusions. If one concludes there is a deviation in the data being analyzed, it is also necessary to question why there is this deviation. Many times there may be a justifiable reason behind a deviation.

What are "standards of performance" for a counselor and from where are they obtained? The performance of a counselor may be, in part, based on agency standards and policy. A possible standard is a level of performance below which a counselor should not fall, i.e., 24, 48, or perhaps 100 rehabilitations per year. Individual counselor standards must be correlated to the composition and characteristics of his caseload. To obtain 24 rehabilitations in a year he must have a certain number of referrals developed, cases accepted, plans written, etc., since there are always definite ratio patterns between these items and they usually remain fairly constant.

If a counselor is working below set standards of performance, a solution to the problem must be sought in conjunction with his supervisor. A counselor will generally work at about the level expected of him. However, if a higher level of performance (i.e., number of rehabilitations) was expected, the counselor would probably be able to meet the new standard.

By publishing the number of rehabilitations each counselor has completed, counselors can compare themselves with the performance of other counselors. This may then develop into a healthy competition amongst the counselors with the number of rehabilitations increasing.

In any review of an agency or counselor workload, it is necessary to review data pertaining to the characteristics of the clients being served (i.e., source of referral and major disabling condition). Information on the source of referrals may indicate that a counselor is overlooking a particular source or is relying too heavily on another. Having information on a particular referral source may help to generate referral support through greater contact with that source.

Statistical data may be very effective in making presentations to State legislatures. This is particularly true in the area of economic returns attributable to rehabilitation. Data can be used to show a need for new legislation or additional funds, or that previous legislation has been effective.

It is questionable whether valid comparisons can be made between States or agencies on a national level. Variations in data may be caused by differences in agency policy, type of services rendered, or the size of the agency. Before comparisons are made, it may be necessary to apply levelers or equalizers to these data.

Keynote Address by Mr. Sigmund Schor, Chief
Division of Statistics and Studies, VRA

STATISTICS FOR THE VOCATIONAL REHABILITATION ADMINISTRATOR

The staff of the Division of Statistics and Studies in Washington wish to add our greetings to those of Mr. Schafer. We are pleased to be here. I have no doubt that we will learn a great deal by the interchange in our discussions. This is the third Statistical Seminar conducted by the Statistics Division and the evidence is mounting of both the need of, and value to State VR agencies of a simple non-technical explanation of the uses of data and their interpretation. We hope that our discussions will give all of us a greater awareness of how to better plan, manage, evaluate, publicize, and justify the VR programs.

I think of this as a laymen's seminar, and we will not confuse the meeting with statistical terminology and jargon. Call it a shirtsleeves affair if you will; an informal approach to arranging and understanding data. Our intention is to point the way toward the use of simple devices and techniques to enable you to see as clearly as possible into the operations of your agencies, to enable you to be better informed about your own programs, and to see if they are moving in accord with State and Federal policies; with your policies if you will. To repeat, this is a laymen's seminar for administrators, not for professional statisticians, and we have left all of the jargon outside.

This may seem odd to you but it is true--that you are far better able than we to interpret the very numbers that we are going to present to you. The reason for this is simply that your experience in program operations has given you greater insight than we possess, about the possible reasons behind variations in caseload and other data that will be presented at this seminar.

I feel that we will have done a good job if we can impress upon you that variations in data may be danger signals which have to be looked into.

During the course of this seminar, we're going to try to cover four major areas:

1. Some ideas for arrangement of data; statistical tables or tabulations which will facilitate your analysis of data.
2. Some of the pitfalls to avoid in using (or should I say misusing?) statistics.
3. The economic gains of vocational rehabilitation and how valuable an economic analysis is in demonstrating to your legislature, or anybody you need to convince (maybe even including yourself), that rehabilitation is indeed a paying proposition, even apart from the human and social values which we all know about.
4. Finally, we expect to spend some time discussing with you the new statistical reporting system which has generated quite a bit of interest.

Our trip will have been worthwhile if we can impress you with the importance of a continuing statistical and economic analysis of agency operations. Unfortunately, statistics are often thought of as some type of esoteric mumbo-jumbo. Therefore, the starting point of my message is the all-pervading presence of statistics and their basic management applications in our lives every day.

For example, we all have time schedules to live by and have to arrange how long to stay at a particular activity. We have bills to pay and we try to insure that our income exceeds our expenses. If it does not, we might have to borrow money, but at least we know about our future obligations. We are always eager to find out how many miles our cars can go for every

gallon of gas. If we are golf or bowling enthusiasts, numbers (our scores) express how well we are doing (or, in my case, not doing). In both sports we often have to calculate our handicaps. Also, imagine how lost the baseball buff would be without his batting averages and earned run averages. Watch the housewife stir the soup, taste, stir again, taste again, etc. There is a born sampling statistician! The present state of the weather is made intelligible to us by reference to temperature, humidity and barometric readings, wind velocities, amounts of precipitation, etc. Of course, we must be informed about the probability of rain during tomorrow's picnic.

Since statistics are a fact of life and we all recognize that they help to bring meaning and order into every day events, the question for us to consider is not whether to use statistics, but how best to use them.

It is quite apparent however, to all of us that numbers can be misused or abused, or both. The old saying, "There are lies, big lies, very big lies, and then of course there are statistics," expresses a basic distrust of statistics and a fear of the distorting effect of their improper use. For example if, while hunting, we shoot at a duck and miss by a foot in front of him and then take another shot but miss again by a foot behind him we might be tempted to claim that, on the average, we had two hits. Also, some local chamber of commerce boasting of its town's yearly average temperature of 70 degrees might neglect to inform a prospective resident that the weather can be as hot as 110 degrees or as cold as 10 below zero. I'm sure you've heard of the non-swimmer who drowned in 10 feet of water because the statistician told him the average depth of the lake was only 6 inches. Finally, one might notice that the number of ordained clergymen seems to rise as does the crime rate through the years, and assume that ours could be a more religious Nation in terms of the number of clergymen, if only there were

more crimes, or even that the crime rate could be lowered if only we could decrease the number of clergymen.

Although these and more serious examples can be multiplied by the thousands, we clearly recognize the great need to express events in ways that distill their true meaning and inform us, in an orderly manner how things are proceeding. Persons who are not statisticians might well be wary about numbers and their use because of all sorts of complicating and qualifying factors that often make up any particular number. Yet if these numbers are reliable and are presented and arranged in a clear, straightforward manner, the individual may be able to find more meaning in the events behind these numbers and unearth more implications for remedial managerial action than he could ever have imagined. When the administrator is finally convinced of the power of this analytical tool called statistics that is at his disposal, he will likely become an advocate of certain principles that we in the central office are concerned with. It is at this point that his interests and our own merge.

For example, he will now have a stake in wanting uniform and standardized data. He will realize that his best chance to make adequate agency-wide decisions is based on receiving the same kind of information reported and recorded in the same manner in all of his district offices, and by all of his counselors. Our new Form R-300 report is intended to help the cause of standardization. But even if standardization is guaranteed, it is possible that the data can be uniformly unreliable. Hence, a second requirement of a statistically oriented administrator is the quality of the statistics he is working with. Do the data really mean what they seem to mean? Yet, even the most reliable and accurate information is useless if it is not available at the time it is most needed--the time a decision has to be made. Therefore, a VR

administrator has a stake in receiving information on a current basis. This usually, but not always, implies some form of automated system of data tabulation. This system, when used properly, will provide data that are not only timely but will enable one to engage in detailed analysis of the sort that one could not hope to accomplish by logical acumen, ouija board, intuition, or by virtue of experience.

These four goals in relation to data, standardization, quality, timeliness and necessary detail should be high on any administrator's list of priorities. Yet there is one ideal that need not be fully realized but merely approached; that ideal is perfection. We in the central office know of instances where some agencies have withheld information from us in order to insure that every "i" was dotted and every "t" was crossed.

Commendable though this attitude often is, it has led to delays in the publication of our reports and has caused us to make estimates of the missing data that were not necessarily near the mark. Ironically, as you see, our reports are less, not more accurate as a result of waiting for "perfect" data. As much as we want good and accurate information, we nonetheless think this situation deplorable when it occurs. We do not think the extra gain of accuracy is worth the cost of delay. Nothing in what I say, however, is meant to imply that information carelessly slapped together but sent in on time is desirable. Nothing could be further from the truth.

There are several ways to insure that data within and between agencies reach the level of standardization, quality, timeliness and detail needed for the most effective assessment and management of agency operations. The first way is to upgrade the level of statistical competence of the agency's staff. The agency should bring on board trained statisticians to the fullest extent possible. I would hope that these would have practical operating

experience as well as an approved academic background. These persons cannot be expected to function in a vacuum of numbers and statistical data. They must have a thorough understanding of the philosophy of the rehabilitation program, the procedures, the problems. They must have contact with the top professional staff, including the Director. They must be included in staff meetings and conferences to insure a well rounded and broad knowledge of the program. Another possibility is that the regional offices can be staffed to provide statistical help to be made available on a continuing basis for the benefit of the VR agencies.

We will continue to support, and hope that we can count on your support for any action which will bring the day closer when statistical knowledge rather than guesswork in State agencies will be the rule and not the exception.

Our Division of Statistics and Studies hopes to expand in the near future into a data center for rehabilitation statistics. The proposed data center would provide statistical services to all persons in rehabilitation and related fields. It would serve as a focus to which all could turn to find out whatever is known about any and all phases of rehabilitation. For example, it is envisioned that the results of research in rehabilitation will be extracted and will be disseminated in an orderly fashion so as best to insure that research will build upon previous work rather than tread the same path, oblivious to what has gone before.

Data would be collected, not only on the characteristics of clients whose cases were closed but also on clients still being served. Information on rehabilitation centers and facilities would flow to the VRA data center as would some characteristics of the clients being served at these centers and facilities.

Pertinent data on manpower needs in the rehabilitation field would also

be maintained as would information on those already employed in State agencies and elsewhere.

Sample studies may be conducted to provide data in other important fields including analyses of the experience of VR clients in the years after their rehabilitation. The value of such studies is self-evident.

Attempts would also be made to provide estimates of the number of persons in each State needing VR services and who would be eligible to receive them. The ability to do this will depend on whether or not we are successful in our request for inclusion of certain vocational disability questions in the 1970 Census of Population. If these questions are asked, we will have the opportunity to estimate disability on a State and, perhaps, local basis. The implications here for State-wide VR planning are very great. To cite just two examples--State administrators would have knowledge of unmet VR needs in their State; this is something they can only guess at now. Additionally, knowing generally where these persons are (assuming local data become available) will help considerably in the deployment of facilities and manpower throughout the State.

Now I wish to refer to "Programing, Planning, and Budgeting", or PPB as it is now familiarly known. This is an attempt at both short-range and long-range planning by studying inputs and outputs in relation to certain functions directed toward specific target groups. That element of PPB that calls for comparing program costs in relation to the return is called "Cost-Benefits Analysis." This type of analysis can be done for all programs. Since the results of the analysis are expressed in terms of dollars of benefits per dollar of expenditure, it is possible to compare different programs with one another. This inter-program comparison does not concern us here, but expressing the value of the benefits of our VR program for every dollar of VR expenditure

is of extreme importance to us. By the term "benefit" I mean literally everything that amounts to a gain to an individual or to society. This gain can be as simple to quantify as are earnings or as difficult to measure as is a deeper sense of personal dignity. This new type of analysis calls for the assignment of dollar values to benefits previously considered as intangible; even benefits to nonrehabilitated clients are to be included.

When completed, the analysis of benefits from VR (all of us know intuitively that these benefits are of a very high order) will dramatically show, in material terms, the inherent value of VR.

On Tuesday afternoon, we will present a brief summary of some of the various benefits and how they can be calculated. We will also distribute a partial cost-benefits analysis. In this analysis we used data reported by the States of California and Washington and we described the manner in which we obtained our estimates. I'm sure that you will find it quite interesting.

Let me repeat my welcome to you. My staff and I are glad to be here. We hope to be able to provide you with the sort of information and insights that will strengthen your hands in the decision-making process. This is your seminar more than it is ours. It will be successful to the degree that you actively participate in the many discussions that will occur. To repeat something said earlier, we firmly believe that you are better qualified than we to interpret the data that we will present. For this reason we fully expect to learn a lot about agency operations during this seminar.

On Wednesday afternoon we will conduct an informal open-house during which you can ask questions or make comments on any matter brought up during the Seminar or on related matters. We certainly hope that as many of you as possible will be able to stay on at that time.

At this time, Mr. Grier, the Assistant Chief of the Division of

Statistics and Studies, will describe how the Seminar is to be arranged and conducted and will introduce you to the Seminar materials. Thank you.

TABLE I
Referral and Applicant Caseload

Referrals (Status 00)		Applicants (Status 02)									
Dist. No.	Coun-selor No.	On hand June 30		New since June 30		Closed (08) since June 30		To status (02) since June 30		On hand Dec. 31	
		On hand	June 30	On hand	June 30	On hand	June 30	On hand	June 30	On hand	Dec. 31
I	01	64	118	115	54	13	93	54	58	11	9 48 21
I	02	43	146	71	106	12	39	106	29	28	7 72 9
I	03	25	132	38	108	11	76	108	35	33	2 91 23
III	04	12	58	11	56	3	16	56	8	4	4 52 4
III	05	29	200	47	164	18	51	164	42	22	2 122 27
II	07	33	134	25	125	17	52	125	22	18	2 106 29
III	09	16	117	53	73	7	25	73	8	8	6 56 20
I	10	139	189	173	119	36	81	119	49	21	9 96 25
I	11	92	159	97	139	15	138	139	29	58	13 151 26
III	12	34	98	28	64	40	48	64	31	12	0 61 8
III	13	37	167	39	139	26	32	139	18	23	17 94 19
II	14	88	74	69	81	12	48	81	32	15	8 70 4
I	15	26	166	72	111	9	49	111	37	0	10 93 20
II	16	23	75	4	89	5	73	89	23	14	2 112 11
III	17	38	188	91	126	9	35	126	57	5	14 70 15
I	18	102	147	163	69	17	127	69	78	10	12 77 19
II	19	59	199	93	154	11	83	154	65	27	4 121 20
III	20	25	218	84	145	14	72	145	70	25	13 83 26
II	22	11	169	31	132	17	69	132	40	19	8 108 26
II	23	2	192	42	124	28	9	124	20	1	25 72 15
II	31	3	173	28	139	9	1	139	18	26	4 79 13

These caseload data are the source document for Tables 1, 2, and 6. Information on the caseload of individual counselors is presented for the six-month period of July 1 to December 31.

TABLE II

EXTENDED EVALUATION CASELOAD

Certified															
Accepted Closed (08) for status															
Coun- On hand		since		since		since		10 since		On hand,					
selor June 30		June 30		June 30		June 30		June 30		Dec. 31					
Dist. No.	04	06	04	06	04	06	04	06	04	06	04	06			
I	01	19	11	11	9	12	7	12	9	6	4				
I	02	11	20	28	7	2	3	34	23	3	1				
I	03	8	5	33	2	5	1	31	5	5	1				
III	04	8	5	4	4	0	0	11	7	1	2				
III	05	17	7	22	2	7	2	28	5	4	2				
II	07	17	21	18	2	0	1	27	19	8	3				
III	09	5	2	8	6	6	3	0	0	7	5				
I	10	5	14	21	9	19	3	4	11	3	9				
I	11	13	38	58	13	11	7	53	36	7	8				
III	12	2	19	12	0	2	0	4	16	8	3				
III	13	19	11	23	17	11	8	25	12	6	8				
II	14	8	12	15	8	4	3	16	9	3	8				
I	15	0	17	0	10	0	4	0	14	0	9				
II	16	14	17	14	2	9	0	14	17	5	2				
III	17	16	21	5	14	3	4	17	19	1	12				
I	18	19	23	10	12	6	15	19	13	4	7				
II	19	22	5	27	4	5	1	32	4	12	4				
III	20	21	28	25	13	2	11	37	14	7	16				
II	22	4	6	19	8	2	4	11	3	10	7				
II	23	0	18	1	25	0	7	0	22	1	14				
II	31	3	9	26	4	6	0	17	11	6	2				

TABLE III

PLAN WRITING

Certified													Backlog			Backlog							
Accepted Closed (08) for status													of plans			TOTAL							
Coun- On hand			since			10 since			On hand,			to be			Plans			of plans					
selor June 30			June 30			June 30			Dec. 31			written,			accepted since			written to be					
Dist. No.			04 06			04 06			04 06			04 06			June 30			June 30			June 30		
I	01	19	11	11	9	12	7	12	9	6	4	I	01	10	69	79	75	4					
I	02	11	20	28	7	2	3	34	23	3	1	I	02	21	129	150	69	81					
I	03	8	5	33	2	5	1	31	5	5	1	I	03	6	127	133	128	5					
III	04	8	5	4	4	0	0	11	7	1	2	III	04	3	70	73	73	0					
III	05	17	7	22	2	7	2	28	5	4	2	III	05	20	155	175	144	31					
II	07	17	21	18	2	0	1	27	19	8	3	II	07	7	152	159	158	1					
III	09	5	2	8	6	6	3	0	0	7	5	III	09	39	56	95	87	8					
I	10	5	14	21	9	19	3	4	11	3	9	I	10	9	111	120	114	6					
I	11	13	38	58	13	11	7	53	36	7	8	I	11	5	240	245	237	8					
III	12	2	19	12	0	2	0	4	16	8	3	III	12	4	81	85	83	2					
III	13	19	11	23	17	11	8	25	12	6	8	III	13	36	131	167	136	31					
II	14	8	12	15	8	4	3	16	9	3	8	II	14	11	95	106	104	2					
I	15	0	17	0	10	0	4	0	14	0	9	I	15	21	107	128	96	32					
II	16	14	17	14	2	9	0	14	17	5	2	II	16	3	143	146	128	18					
III	17	16	21	5	14	3	4	17	19	1	12	III	17	27	106	133	118	15					
I	18	19	23	10	12	6	15	19	13	4	7	I	18	5	109	114	111	3					
II	19	22	5	27	4	5	1	32	4	12	4	II	19	16	157	173	150	23					
III	20	21	28	25	13	2	11	37	14	7	16	III	20	15	134	149	114	35					
II	22	4	6	19	8	2	4	11	3	10	7	II	22	27	122	149	148	1					
II	23	0	18	1	25	0	7	0	22	1	14	II	23	39	94	133	90	43					
II	31	3	9	26	4	6	0	17	11	6	2	II	31	24	107	131	78	53					

1/ In order to balance, this column assumes a plan was written for each case closed in status 30, whether actually written and approved or not.

These caseload data are the source document for Tables 3, 4, and 5. Information on the caseload of individual counselors is presented for the six-month period of July 1 to December 31.

TABLE IV
Vocational Rehabilitation Case Services Caseload

Dist. No.	On hand, statuses 10-24	Accepted since June 30					Cases closed since June 30					ACTIVE CASES, BY STATUS, DEC. 31										
		since June 30					since June 30															
		02	04	06	08	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	Total
I 01	106	48	12	9	59	17	7	4	5	35	16	9	13	5	92							
I 02	228	72	34	23	79	2	58	81	7	0	37	14	57	18	4	218						
I 03	157	91	31	5	64	1	0	5	7	12	43	27	44	74	7	219						
III 04	81	52	11	7	56	2	0	0	3	4	21	6	2	53	4	93						
III 05	103	122	28	5	75	0	0	31	2	0	56	14	9	66	5	183						
II 07	120	106	27	19	72	7	5	1	7	15	61	26	10	51	17	188						
III 09	174	56	0	0	57	13	39	8	2	2	16	34	1	54	4	121						
I 10	125	96	4	11	68	20	24	6	10	0	13	42	18	27	8	124						
I 11	66	151	53	36	83	7	11	8	11	38	7	17	15	65	44	205						
III 12	145	61	4	16	90	8	7	2	0	20	19	13	6	61	0	121						
III 13	223	94	25	12	75	29	52	31	1	1	43	23	15	77	7	198						
II 14	139	70	16	9	36	12	7	2	0	9	37	15	20	66	30	179						
I 15	203	93	0	14	80	14	30	32	2	5	68	31	2	43	3	186						
II 16	35	112	14	17	57	2	2	18	0	4	16	38	8	30	3	117						
III 17	121	70	17	19	70	9	17	15	4	12	27	21	14	36	2	131						
I 18	194	77	19	13	58	12	23	3	10	9	46	15	38	85	4	210						
II 19	146	121	32	4	99	6	4	23	12	6	23	11	3	98	8	194						
III 20	139	83	37	14	60	7	27	35	1	7	26	22	12	64	12	179						
II 22	72	108	11	3	37	0	1	1	8	2	29	7	27	69	13	156						
II 23	196	72	0	22	72	0	13	43	12	52	26	8	17	38	9	205						
III 31	135	79	17	11	53	1	11	53	13	1	30	24	20	19	17	177						

These caseload data are the source document for Tables 4, 5, and 6. Information on the caseload of individual counselors is presented for the six-month period of July 1 to December 31.

THE REFERRAL CASELOAD

The data shown in Table 1 are arranged in such a way as to reveal a number of important items of information about the processing of referrals and applicants in the monthly caseload. The data raise questions in regard to the operating efficiency of individual district offices and counselors. Some of the more obvious questions are:

1. What is the individual district performance in terms of an acceptance rate? Individual districts range from a low of 33 percent to a high of 49 percent acceptances. (Table 1, col. 12). Is a low rate good or bad? Is a high rate good or bad?
2. What is the monthly processing rate for referrals? Is a high rate (average) good or bad? How does it relate to the average number of new referrals monthly? To the number of months backlog of referrals remaining to be processed?

Acceptance Rates

Among all districts in the state, District I accepted proportionately fewer of its processed referrals--about 33 percent (Table 1, col. 12). Examination of Table 1A, column 12 (the District I table, by counselor) showed that counselors 01, 10, and 18 were the principal contributors to the low District I average, each counselor with about a 25 percent acceptance rate. The overall acceptance rate for the other four counselors was 42%.

Obviously, no conclusions can be drawn from these observations until it has been first determined that all counselors are reporting all referrals on the same basis. On the other hand, the existence of these observations seems to demand that an investigation be made to determine the uniformity or lack of uniformity in the recording and reporting of referrals between individual counselors.

The Referral Backlog

Compared to the other two districts, District I processed its referrals more quickly. The backlog of unprocessed referrals was only 12 percent of all referrals reported for the period, slightly less than one month of work at current processing rates (Table 1, cols. 9 and 13). The other two districts had a month or more backlog of unprocessed referrals. In view of the fact that most of District I's total referral load was not new (Table 1, col. 16) and that its acceptance rate was the lowest of the three districts (Table 1, col. 12), is the District I position, relative to its referral backlog, good or bad? What administrative actions would you suggest?

Your particular attention is directed to counselor 02 (Table 1A, cols. 9 and 13). In your opinion, is the caseload management position of counselor 02 desirable or undesirable? Is his a good working backlog of referrals; is it too small; or is it too large? Would length of time referrals have been "in status" influence your decision?

New Referrals

District I was the only district whose new referrals accounted for less than half of the total referrals reported as available during the period (Table I, col. 16).

Counselors 01, 11, and 18 were particularly low in the reporting of new referrals developed during the period. For each of these three counselors, new referrals reported accounted for 42 percent or less of their total referrals. For three of the four remaining counselors in District I, new referrals accounted for more than half of their total available referrals (Table 1A, col. 16). In your opinion, is the development of new referrals important? If yes, what administrative steps are desirable to ensure an adequate supply? What are the effective supply sources in terms of volume, high rate of acceptance, and high rate of rehabilitation? What are your present sources for this kind of information? How is the information disseminated to counselors? How is it followed through for appropriate training where effective development by a counselor is not materializing? What is the most desirable "balance" for a counselor to maintain between time spent in developing new referrals and time spent in guidance, counseling, placement, and provision of case services for his active caseload?

The Total Referral Caseload

Individual components of the referral caseload have already been analyzed. Considering the total referral caseload as a single problem, with each of its components positioned in its proper perspective, it would appear that of all the districts, District I is doing the poorer overall job in handling referrals. This evaluation is based on the following observations from Table 1: that District I is processing reported referrals at the highest monthly rate, that its rate of acceptance is the lowest, and that the reported development of new referrals is the lowest. Overall, this seems to indicate a downhill course which must soon lead to a lowered referral processing rate simply because the total referrals available is rapidly drying up. From Table 1A it would seem that counselors 01, 10, 11, and 18 are the principal contributors to this situation. Do you believe that this information requires some administrative action? If yes, what action would you suggest should be taken, and how would you put such action into effect?

MONTHS TO ZERO BACKLOG OF REFERRALS

Table 2 is intended to provide an artificial but useful measurement of the load of unprocessed referrals. Since it is assumed that rates of processing of referrals and developing new referrals remain frozen at their current levels, one can ask how many months it will take before all referrals are processed so that none are left.

Artificial though this measure is, it can be used as a warning signal either that the time has come to develop new referrals or to reduce current referral backlog, as the case may be.

What "months-to-zero backlog" level do you think that districts and counselors should remain above as a matter of course? Three months, perhaps?

Comparisons

District I has the fewest number of months to go before the backlog of referrals theoretically will be eliminated (Table 2, col. 4). It developed about the same number of referrals as did Districts II and III (Table 2, col. 3) but processed many more cases than did the others (Table 2, col. 2).

Assuming that it is not reasonable to ask District I to reduce the number of referrals it is processing each month, what would you advise it to do in order to develop new referrals? Where does one look to first of all?

Four of the District I counselors 01, 02, 11, and 18, are all below the two month level while counselor 15 is above the four month level (Table 2A, col. 4).

As a matter of interest, it should be noted that counselors showing more new referrals a month than processed referrals will have, in effect, an endless backlog. (See Table 2B, col. 4 for two examples of this.)

THE WRITING OF PLANS

The information shown on Table 3 generates questions about the performance of the districts and counselors in the matter of writing plans. It shows differences in rates of processing new plans each month, and still greater differences in the number of cases whose plans have not yet been completed. It clearly indicates that some counselors should reduce their backlog of unwritten plans so that clients are not delayed in the receipt of services for lack of a completed plan.

The following discussion proceeds on the assumption that all Status 30 closures have been recorded as plan completions whether or not in fact plans were written. This adjustment is needed in order to properly reflect the backlog of unwritten plans. The backlog of plans to be written and cases accepted less the plans completed, equals the number of plans still to be completed.

Plan completions

The performance of all three districts in the writing of plans is very close to the average of 136 plans per month. Of the counselors in District I, counselor 03 was the closest to the District average of 20. Counselor 11 had 39 plan completions compared to counselor 02 with 11 plan completions (Table 3A, col. 3).

Backlog

Districts I and II had a backlog of plans to be written greater than the State average of 134 while District III had a smaller backlog (Table 3, col. 4). All three districts, however, had a one-month backlog of plans to be written at the average rate (Table 3, col. 5). Since all of the districts had the same backlog, is one month a good rate?

In District I, counselor 02 had a backlog of 81 plans to be written and counselor 15 had a backlog of 32 compared to less than 9 plans for all the other counselors (Table 3A, col. 4). Is a large backlog of plans to be written desirable for a counselor who has a large monthly average of plan writing? Counselor 02 had a 7.4 months backlog compared to 3 counselors with .2 of a months backlog. When analyzing these data, the question arises as to what is the best working backlog of cases with unwritten plans. In what way is it possible to control the backlog through the rate cases are accepted? Should districts with heavy backlogs of unwritten plans require their counselors to slow down on accepting cases?

THE ACTIVE CASELOAD

Table 4 is of particular importance covering a wide area of concern -- the active caseload from statuses 04-30. One of the questions answered in Table 4 is: What percent of the closures were rehabilitated (Table 4, col. 13)? Knowing that not all accepted cases will be closed rehabilitated, is there, nonetheless, a minimum rehabilitation rate with which you can be satisfied?

Is it proper to maintain certain proportions of the active cases in various statuses? What relationship is there between acceptance rates (Table 1, col. 12) and rehabilitation rates (Table 4, col. 13)? Does this relationship surprise you?

Closures

For every four cases closed in District I as not rehabilitated (includes EE), six were closed rehabilitated. District I had a successful closure percentage of 60 while Districts II and III successfully closed higher proportions of all their closures--79 percent and 64 percent, respectively (Table 4, col. 13).

District I, we noted previously, had the lowest acceptance rate of the three districts (Table 1, col. 12). If we assume that a low acceptance rate indicates particular caution in the accepting of cases for services, how can we explain District I's relatively low rehabilitation rate? If it was not more strict and careful in accepting cases than were the other districts, why the low acceptance rate? Possible answers may lie in either more complete recording and reporting of all referrals, or in the need to educate referral sources in what are acceptable VR referrals or a combination of these factors.

Counselors 10 and 18 were the largest contributors to District I's relatively low rehabilitation rate (Table 4A, col. 13). Only 51 percent of their closures were successful compared to a District average of 60 percent.

The overwhelming majority of counselor 02's unsuccessful closures were not rendered any services other than guidance and counseling (Table 4A, col. 15). Do you think it advisable to look further into the reasons for closure of counselor 02's status 30 cases?

Counselor 03 operates quite differently from counselor 02. Almost every one of counselor 03's closures were successful (Table 4A, col. 13). Delighted though we are at success, we think, nonetheless, that counselor 03's near perfection warrants closer examination. Perhaps he is not closing out his unsuccessful cases or is accepting only simple physical restoration cases.

If you studied some of the reasons for non-rehabilitation closure, would you question any of these as being more applicable to status 08 closures than to status 28 or 30 closures--"insufficient disability"? "declined services"? "shows little interest"? "no vocational handicap"?

Cases in Active Statuses

A higher proportion of District I's active cases (14%) was in the ready-for-employment status (Table 4, col. 8) than was the case for the other two districts while a lower proportion of its active cases was in employment (25%) than for Districts II and III (Table 4, col. 9). Is this enough information to suggest placement problems in District I? If not, what other information is needed to analyze the differences?

Counselor 02 in District I stands out for several reasons. In comparing his active case files with those of his fellow counselors, relatively more of his cases are in the plan-writing statuses (Table 4A, col. 6), fewer in training and medical statuses (Table 4A, col. 7), more waiting for employment (Table 4A, col. 8), and fewer in employment (Table 4A, col. 9). Also counselor 02 had the lowest proportion of closures that were successful (Table 4A, col. 13) among all of the district's counselors. Do you find any objections to this counselor's sharply different case file loads in the various statuses? If so, what are these objections? Would you require counselor 02 to reduce his backlog of unwritten plans so that he might increase the number of his clients in statuses 14-18? Would you ask him to work harder on placing those cases that are ready for employment?

LENGTH OF TIME TO CLOSE CASES

Table 5 shows the percent of rehabilitated and non-rehabilitated cases closed within stated periods of time after acceptance. Its intention is, first, to note differences in length of time needed to close a rehabilitated case versus a non-rehabilitated case. The table will forcefully bring to mind the occasionally long lengths of time that some cases remain in the files unclosed. Another intention of the table is to compare the performances of the three districts to one another to yield information on differences, if any, between them. Large differences in lengths of time to closure might imply different closure policies in the districts.

Length of Time to Rehabilitate a Client

District I closed its rehabilitated cases somewhat less quickly than did the other two districts. For example, about 71% of District I's closures occurred within two years but for Districts II and III the percentages were 76% and 78%, respectively (Table 5, cols. 7-9). At the end of any time period up to five years District I had completed a smaller percentage of all its rehabilitated closures than did District II, but did not have any closures beyond six years while District II had a few. District I did a little better in comparison to District III which also had a few closures after more than six years.

Length of Time to Close a Status 28 Case

Fewer of District I's status 28 cases were closed by the end of each year up to seven years than was the case for the other two districts (Table 5, cols. 10-12). For example, only 44% of District I's closures occurred within two years but about two-thirds of the other two districts total closures were completed by the end of two years. What are some possible reasons that you could advance to explain this difference between District I and the other districts? Do you favor the policy of "holding on" to a case where there is still a glimmer of possible success? Or do you feel that a reasonable doubt that a client can be rehabilitated is sufficient to close him from the active files?

Length of Time to Close a Status 30 Case

As with the status 28 cases, District I took longer to close out clients from status 30. Again, a smaller percentage of its status 30 closures occurred by the end of each year for seven years than was the case for Districts II and III (Table 5, cols. 13-15). For example, at the end of two years only about one-half of District I's cases were closed but about three-quarters of District II and III's cases were closed. Do you feel it more difficult to explain a long time span involved in closing a case from status 30 than from status 28? What possible explanations are there to the fact that six percent of District I's status 30 cases were closed after seven years? Do you feel there is generally a point beyond which a case whose plan has not yet been initiated should be closed out? If you felt District I was taking too long to close cases, what steps would you require of the district to speed up its closure time?

Length of Time to Close a Status 08 Case

The rate at which status 08 closures occurred appears to be influenced by whether the case was in 6-month or 19-month extended evaluation (Table 5, cols. 4-6). A large number of the closures occurred after 6 months with all closures occurring within the 18 months. In contrast to the other two districts, District III required more time for closure. This is due to the relatively larger number of 18-month extended evaluation cases in District III.

Rehabilitated versus Non-rehabilitated Closures

For each district, status 26 closures occurred sooner than did either status 28 or 30 closures. The slowest closure rates of all occurred among the status 28 cases. Is there anything in this that surprises you or is it what you would have expected?

For Districts II and III the length of time to close a status 30 case was slightly longer than to close a rehabilitated case. For District I, however, the length of time was considerably longer. Would you suspect District I of carrying cases in their files that may well have been forgotten about? Why should (for Districts II and III) status 30 cases have taken almost as long as did rehabilitated cases? The table seems to indicate that, broadly speaking, the longer an active case is held, the less likely that a rehabilitation will occur. What do you think of this?

CLOSURE WITHOUT SERVICES OTHER THAN GUIDANCE AND COUNSELING

Table 6 shows in a single table the number of "non-service" closures relative to the number of referral/applicant cases processed. The similarity between status 08 and status 30 closures, which were adjusted to exclude those cases receiving services during extended evaluation, lies in the fact that in neither instance did the client receive services other than guidance, counseling, and diagnosis prior to closure. The following discussion assumes that in instances where guidance and counseling alone were called for in a rehabilitation plan, unsuccessful closures were recorded as 28 rather than 30 if the counseling and guidance sessions had begun by closure time. A single figure is shown for the total cases closed without service as a percent of the total referral/applicants processed.

Comparisons

District I with a "non-service" rate of 62 and District III with a "non-service" rate of 56 are both above the state average rate of 54 (Table 6, col. 2). What would be the ideal "non-service" rate, and which district comes closer to this rate?

When we look at District I counselors (Table 6A) we find several that do not provide services to a large proportion of their referrals processed. Only two counselors, 03 and 11 with rates of 37 and 39, respectively, provide services to more than half of their referrals. It should be noted that counselor 03 has the lowest rate of cases closed without services and has no status 30 closures. Is this pattern followed through with the other counselors?

HISTORICAL CASELOAD RELATIONSHIPS

The information in Table 7 is intended for budgetary, planning, and management use. Two major examples of such uses are as follows:

1. Projection of caseload items

By studying the historical relationships between certain caseload items one can make reasonable estimates of the number of these items in the future simply by assuming a continuation of these relationships in the estimates. Thus, column 3 of Table 7 shows a historical relationship of three to one between referrals and acceptances. Reasonable estimates of next year's referrals and acceptances would maintain this three to one relationship (unless, of course, it were intended, as a matter of policy, to obtain, for example, a much larger store of referrals than ever before or a larger number of cases accepted for services).

Another use of the relationships would be to check on the reasonableness of estimates already made. Thus, one can say that the estimates shown on the last two lines of Table 7 are in some instances reasonable (Table 7, col. 5) and in some instances not reasonable (Table 7, col. 7).

In all of this it should be pointed out that before estimates of caseload items can be made based on past relationships one must begin with an estimate of a particular caseload item derived in some other way.

2. A check on fulfillment of agency policy

Another major use of the historical caseload relationship over the course of time is to see if these changes are, in fact, in accord with agency policy. Thus, one might notice that the relationship between referrals and acceptances has decreased to the lowest level in years (Table 7, col. 3), and ask whether more acceptances relative to referrals is a result of agency policy or has occurred without full notice on the part of management.

The changing relationship brings up certain questions as to its meaning such as: Is a less strict enforcement of eligibility requirements occurring? Or is it simply that fewer referrals are being generated? Which referral sources are beginning to send more eligible persons? Who are these eligible referrals? Are they younger? Or are they less disabled?

Table 7 can also be set up for districts or for any particular group of interest.

Do you see any other possible uses for Table 7? Might a State Supervisor be interested in the historical relationships shown in other agencies of his region?

ACCEPTANCE RATES BY SOURCE OF REFERRAL

After having seen information on the referral caseload of a district, further analysis of data may throw some light on some of the district performance differences. Tables 8A, 8B, and 8C analyze the processed referrals accepted or rejected by each source of referral.

Table 8A shows the rate at which a district has accepted for service its processed referrals, by each source of referral. District II had the highest acceptance rate for all sources, at 61%, while District I had the lowest rate, at 44% (Table 8A, col. 2). The highest acceptance rate for any one source was 76% and is found under physicians for District I (Table 8A, col. 8). The lowest acceptance rate overall is found relative to the BOASI referrals (Table 8A, col. 10). Must this always be the case? What can be done to change the situation so that the acceptance rate can be increased? What effect do you think that the new Social Security Trust Fund provision will have on this matter?

The overall acceptance rate from welfare sources was 45%, the second lowest rate (Table 8A, col. 12). Do you think that greater understanding of VR aims and policies would enable welfare agencies to refer persons with a greater rehabilitation potential than before?

In Table 8B we learn how many of each referral source's total acceptances are accounted for by each district--and how many of each source's rejections are accounted for by each district. For all sources (Table 8B, cols. 1 and 2) we see that while each district accounts roughly for one-third of all acceptances, District I accounts for one-half of all rejections from all sources. This is another way of looking at its relatively low acceptance rate.

District I accounted for only 12% of all acceptances from educational institutions but accounted for 43% of all rejections (Table 8B, cols. 3-4). In both Districts II and III the weight in acceptances from educational institutions exceeded the weight in rejections. What are some of the possible causes of such district differences? Is it that in District I the area of referrals from educational institutions has not been explored to its fullest extent? Or that there is a cooperation failure? Or that District I is incorrectly recording referrals? Have you ever experienced anything like this? What did you do about it?

For some reason District I accounts for a particularly high proportion of acceptances from physicians (Table 8A, col. 8). This is the only referral source with which District I pulls greater weight among acceptances than it does among rejections. Is this reason enough to suspect that District I has developed better working relationships with doctors than it has with other sources? What else does the table show? Which sources are "best" or "worst" for Districts II and III?

Table 8C shows the percent of each district's acceptances and rejections that come from each source of referral. An interesting observation from this table is that District I is accepting only 4% of all its referrals from BOASI while District III is accepting 10% (Table 8C, col. 9). What are some of the reasons differences like this may arise? Is it simply that District I might have more BOASI clients than does District III? Notice that fully a third of all of District I's acceptances come from physicians (Table 8C, col. 7). Do you think this implies over-reliance on a single source? Is there any such thing as a "balance" of referrals from different sources?-- That is, that so many percent should come from this source, so many from that, etc.?

REHABILITATION RATES BY SOURCE OF REFERRAL

Tables 9A, 9B, and 9C show information on successful or unsuccessful closures by each source of referral. They are meant to point out which sources yield the highest rehabilitation rates (percent of all closures that are rehabilitated) and how districts differ from one another in trying to rehabilitate persons from these different sources.

Table 8A shows that of all closures having BOASI or a welfare agency as the source of referral, only one in two was closed rehabilitated in District I (Table 4A, col.s 10 and 12). On the other hand, District I closures having physicians as a referral were closed rehabilitated at a rate of 86 for each 100 (Table 9A, col. 8). In Districts II and III for each referral source, the percent rehabilitated of all closures, was equal to or greater than the rate for District I, except for the "self-referrals" and "other".

Should one expect to rehabilitate relatively more clients from some sources than from others? If so, which sources? And if so, how does one evaluate the presumption that the rules for acceptance are the same for everyone, and that, regardless of referral source, those persons accepted for VR services all are deemed to have a good VR potential?

Table 9B reveals the fact that District II was able to account for a larger share of each referral source's rehabilitations than for the same referral source's non-rehabilitations. District I had exactly the opposite experience. District I, as we learned earlier, had the lowest acceptance rate of referrals and now we see that it produced more than its share of weight towards the non-rehabilitations.

Table 9C reveals again how valuable a referral source that "physicians" has been for District I. Nearly one-third of all its rehabilitations came from this source (Table 9C, col. 7) while only 11% of its rejections are accounted for by physicians (Table 9C, col. 8). Each of the other referral sources (except for the self-referrals) accounted for a greater proportion of District I's non-rehabilitations than rehabilitations. In view of this performance do you feel that any corrective action is necessary? If so, what action? Suppose District I claimed that its rehabilitations were of a high order of "quality". What would be your reaction?

ACCEPTANCE RATES BY MAJOR DISABLING CONDITION

Tables 10A, 10B, and 10C provide information about the acceptance and rejection of referrals and their major disabling condition. It is intended that they point out areas of district performance differences in processing persons with various disabilities and also suggest which disabilities may be easier or more difficult to deal with.

Table 10A yields the acceptance rates by district by major disabling condition. Particularly striking are the acceptance rates of 27% and 22% for District I for mental retardation and cardiac disease (Table 10A, cols. 14 and 16). These are by far the lowest rates for any disability for any district. Since District II accepts as many as 71% of its mental retardates, for example, it would appear that this is an area that could stand further investigation to answer these questions:

Is District I too strict in accepting mental retardates? Or is District II too lenient? Or are District I's mentally retarded referrals simply more difficult to deal with?

District I was the most successful district in accepting orthopedics (Table 10A, col. 6). Here again, do you think that District I might be "specializing" in a sense as it appeared to be doing with the referral source of physician?

For each and every disability other than orthopedic impairments, the acceptance rates for District I were less than those for Districts II and III. Do such variances as these suggest to you that the agency's policies are not being fulfilled in District I? What other information do you need, if any, to determine beyond a reasonable doubt that District I is not operating in accord with policy?

Table 10B provides information on the percent of accepted and rejected referrals each district had for each major disabling condition's total processed referrals. It was previously noted that while the proportion of all acceptances for the three districts was roughly one-third each, District I accounted for almost half of the referral rejections in the state. The two disabilities that most "contributed" to District I's total rejections from referral were mental retardation and cardiac diseases. For the state as a whole, 66% and 59%, respectively, of all rejections of persons with these disabilities came from District I (Table 10B, cols. 14 and 16). On the other hand District I was the largest contributor to the acceptance of orthopedics (Table 10A, col. 5), thereby lending more fuel to the theory of "specialization".

Following through with the next table about District I's possible "specialization" in orthopedics we note that by far the largest proportion of all its referrals accepted were orthopedics (Table 10C, col. 5). Note that for Districts II and III the proportion of accepted cases and rejected cases accounted for by each major disabling condition is roughly the same. For District I, however, wide differences occur with four of the disabilities. Do you think, from the above data analysis, that practices and policies in District I should be examined more closely?

REHABILITATION RATES BY MAJOR DISABLING CONDITION

The last set of tables, Tables 11A, 11B, and 11C contain information on successful and unsuccessful closures for each of the major disabling conditions. We expect tables in this area to generate concern on matters such as: How many rehabilitations are there for each major disabling condition compared to the total number of non-rehabilitated closures with the same condition? Can one reasonably expect more success with one major disabling condition than one can with another?

The rehabilitation rates of a district's closures are shown on Table 11A by each major disabling condition. District I was not able to rehabilitate more than one in two mentally ill and mentally retarded clients (Table 11A, cols. 12 and 14). The other two districts rehabilitated over 70% of persons with both disabilities (Table 11A, cols. 12 and 14). Can you think of any reasons that would support District I's performance? The rehabilitation rate for District I for all disabilities other than for the mental impairments was 78% which makes it quite comparable to the rates of the other two districts.

As usual, District I's concentration on orthopedics shows up quite clearly. Its rehabilitation rate for this disability was 84% (Table 11A, col. 6), well ahead of the rates for the other two districts.

Table 11B pertains to the percent of rehabilitations and non-rehabilitations by each disability accounted for by each district.

As expected, District I dominates the number of rehabilitations of orthopedic cases (Table 11B, col. 5) but contributes over 60% of all of the mental retardation and mental illness non-rehabilitations (Table 11B, cols. 12 and 14). District II contributed twice as heavily to all rehabilitations as it did to the non-rehabilitations (Table 11B, cols. 1 and 2) but contributed more heavily to the orthopedic non-rehabilitations than it did to the orthopedic rehabilitations (Table 11B, cols. 5 and 6).

From Table 11C we see that for District I, 50% of the rehabilitations were orthopedics (col. 5). District II experienced the opposite effect for orthopedics. About 50% of its non-rehabilitations were orthopedics. How might one explain this difference? Would you say that District II simply has not specialized in handling orthopedics the way that District I has? Do you feel that District I's performance in accepting and rehabilitating cases with other disabilities has been impaired by the apparent over-emphasis on orthopedics?

The Economic Values of Vocational Rehabilitation

Relatively little work has been done in the field of the economic values of vocational rehabilitation. One reason for this may be the great stress that has always been placed on the human values of vocational rehabilitation. Traditionally, material benefits have been demonstrated by selected individual cases dramatized by the "before-and-after" picture. Also, it has been generally assumed that the human values could not be quantified other than by the traditional approach.

Nonetheless, a powerful case for the value of vocational rehabilitation can be made in economic terms. Although, less dramatic in humanitarian appeal, the quantification of the economic benefits of vocational rehabilitation can often strengthen the hand of directors and other administrators of vocational rehabilitation programs in budgeting, legislation, and public information.

The most easily equated measure of economic benefits is the dollar, and we in vocational rehabilitation are fortunate that so many of the major benefits of our program can be reduced so readily to dollar terms. Some of the economic benefits that most often accrue as benefits from VR services, and which can be quantified in dollar terms, are:

a) Increased earnings of clients, b) increased ability to remain in employment for a longer period of time, c) increased man-hours of production, d) increased returns to state and local governments in income taxes, sales taxes, etc., e) reduction in public assistance payments, f) reductions in the costs of institutional care for clients previously residing in public institutions, g) reduction in unemployment insurance payments and workmen's compensation, and h) reduction in the burden of support for the disabled person on the part of family members and friends.

The above list is far from exhaustive, but it provides an indication of the varied ways in which measurable benefits from VR services can and do lead to economic gains for individual human beings and for the people as a whole.

The following illustrations detail the ways in which some of the above listed benefits may be determined and used by agency directors for effective budget presentation. In addition, we have introduced one facet of the long range planning and financing techniques which has been gaining wide acceptance among top-level State and Federal administrators. This technique is referred to as Planning, Programming, and Budgeting (PPB). One facet of PPB is the measurement of the total benefits of a program in dollar terms against the cost of that program (Cost-Benefits Analysis).

In a complete, all-encompassing economic analysis, one would try to estimate the value of literally all benefits due to VR for as long a future time span as these benefits remain in effect and would compare these benefits to the total applicable costs. By "literally all benefits", we mean the assignment of a dollar value even to those benefits which are very intangible and which never before have been quantified. However, our presentation has limited itself to showing the more tangible gains which, by themselves, are quite considerable.

Additional Ways of Determining the Economic Benefits of
Vocational Rehabilitation

This presentation is intended to show some of the more obvious examples of the economic values that come from rehabilitating people. It will show that, even apart from humanitarian considerations, the rehabilitated persons referred to in this presentation returned to or saved the state in one year more than \$1.67 for each dollar the state invested on the entire program in the same year.

The data used in this presentation are actual figures for a state for a recent year.

The summary of returns to the state in one year is as follows:

Increase in state sales tax paid by rehabilitated persons	\$ 37,850
Increase in state income tax paid by rehabilitated persons	65,998
Savings in state funds on public assistance . . .	152,091
Savings in state funds for support of persons in public institutions	<u>1,607,661</u>
	\$1,863,600
Total state expenditures on vocational rehabilitation in one year	\$1,113,113

Individual agency data not included in this presentation will be provided to participants at the seminar.

Annual Increase in Earnings Due to Rehabilitation

The total increase in the earnings of the rehabilitated persons due to rehabilitation was determined by subtracting the annual rate of earnings of these persons at acceptance from their annual rate of earnings at the time of closure.

Sources of information used were:

VRA Form R-302, Part 5, Number of rehabilitations, grouped by total earnings in the week before acceptance.

VRA Form R-305, Part 2, Number of rehabilitations, grouped by total earnings in the week before closure.

Method:

1. For each of the weekly earnings groupings shown on VRA Form R-302, Parts 2 and 5; an annual earnings was determined by multiplying the midpoint of the weekly grouping by fifty. The following results were obtained:

Table 1

Weekly Earnings

Annual Earnings

None	None
\$1-9	\$ 250
\$10-19	\$ 725
\$20-39	\$ 1,475
\$40-59	\$ 2,475
\$60-79	\$ 3,475
\$80 or more	\$ 4,500 (\$90 was used as midpoint)

2. The annual earnings groupings from step 1 above were then multiplied by the number of persons reported to have fallen within each weekly earnings group at acceptance (R-302, part 5).

Table 2	000	x	1,755	equals	\$	0
	250	x	0	equals	\$	0
	725	x	13	equals	\$	9,425
	1,475	x	49	equals	\$	72,275
	2,475	x	57	equals	\$	141,075
	3,475	x	46	equals	\$	159,850
	4,500	x	35	equals	\$	157,500
			SUM		\$540,125	Total earnings at the time of acceptance (yearly)

3. The annual earnings groupings from step 1 above were then multiplied by the number of persons reported to have fallen within each weekly earnings group at closure (R-305, part 2).

Table 3	000	x	174	equals	\$	0
	250	x	5	equals	\$	1,250
	725	x	26	equals	\$	18,850
	1,475	x	188	equals	\$	277,300
	2,475	x	490	equals	\$	1,212,750
	3,475	x	534	equals	\$	1,855,650
	4,500	x	538	equals	\$	2,421,000
				SUM	\$	5,786,800
						Total earnings at the time of closure (yearly).

4. The result of step 2 is then subtracted from the result of step 1. This will give the increase in annual earnings due to rehabilitation.

$$\$5,786,800 \text{ minus } \$540,125 \text{ equals } \underline{\$5,246,675}$$

5. Since there were 1,955 rehabilitations, then the annual rate of increase in earnings per rehabilitation was \$2,684.

State Sales Tax Increase Due to Rehabilitation

The total increase in the amount of state sales tax paid by the persons rehabilitated was determined by subtracting the state sales taxes paid at acceptance from the state sales taxes paid at closure.

Sources of information used were:

Estimated R-311, Number of Rehabilitations, by Earnings in the Week before Acceptance, Earnings in the Week before Closure, crossed by Number of Dependents.

State Sales Tax Deduction Guides from 1966 U. S. Master Tax Guide, Commerce Clearing House, Inc., Chicago, Ill.

Method:

1. Using the state sales tax deduction guides and the Form R-311, a table was made to establish the state sales tax paid for each earnings group crossed by each number-of-dependents grouping. The following is the outcome of this procedure when applied to our sample state.

Table 5 Estimated state sales tax paid (in dollars) by clients within each earnings group and dependents group.

Weekly Earnings	Annual Income Assumed	Income Group from table	Number of Dependents							
			0	1	2	3	4	5	6	7 or more
Zero	Zero	Less than \$1,000	\$15	\$21	\$21	\$27	\$27	\$27	\$27	\$27
\$1- 9	\$ 225	Less than \$1,000	15	21	21	27	27	27	27	27
\$10-19	\$ 725	Less than \$1,000	15	21	21	27	27	27	27	27
\$20-39	\$1,475	\$1,000-\$1,499	20	27	28	34	34	34	34	34
\$40-59	\$2,475	\$2,000-\$2,499	28	38	40	48	48	48	48	48
\$60-79	\$3,475	\$3,000-\$3,499	35	47	50	58	60	61	61	61
\$80 or more	\$4,500	\$4,500-\$4,999	44	59	64	72	76	78	78	78

2. Multiplying the cells of Table 5 by the corresponding cells of the state's Form R-311 on earnings at acceptance yields a state sales tax at acceptance of \$41,033 per year for all rehabilitated closures.

3. Multiplying the cells of Table 5 by the corresponding cells of the state's Form R-311 on earnings at closure yields a state sales tax at closure of \$78,883 per year for all rehabilitated closures.
4. Subtracting step 2 result from step 3 result -

\$78,883 minue \$41,033 equals \$37,850 per year increase in the amount of state sales tax being paid by the rehabilitated persons.
5. Since approximately \$1,113,113 was spent in state funds on rehabilitation services, 3.4% of it will be returned in one year through the increase in state sales tax.

State Income Tax Increase Due to Rehabilitation

The total increase in the amount of state income tax paid by the persons rehabilitated was determined by subtracting the current rate of state income taxes paid at acceptance from the annual rate of state income taxes paid at closure.

Sources of information used were:

Estimated VRA Form R-311, Number of Rehabilitations, by Earnings in the Week before acceptance. Earnings in the Week before Closure, crossed by Number of Dependents State Income Tax Structure, based on statutes of the state involved.

Method:

1. Using state income tax tables and the Form R-311, a table was made to establish the state income tax paid for each earnings group crossed by each number-of-dependents groupings. The following is the outcome of this procedure when applied to our sample state.

Table 4 Estimated state income tax paid (in dollars) by clients within each earnings group and dependents group.

Weekly Earnings	Annual Income Assumed	Number of Dependents							
		0	1	2	3	4	5	6	7 or more
Zero	Zero	0	0	0	0	0	0	0	0
\$1-9	\$ 225	0	0	0	0	0	0	0	0
\$10-19	\$ 725	0	0	0	0	0	0	0	0
\$20-39	\$1,475	15	0	0	0	0	0	0	0
\$40-59	\$2,475	38	18	0	0	0	0	0	0
\$60-79	\$3,475	64	42	21	2	0	0	0	0
\$80 or more	\$4,500	96	73	50	29	8	0	0	0

2. Multiplying the cells of Table 4 by the corresponding cells of the state's Form R-311 on earnings at acceptance yields a state income tax at acceptance of \$6,035 per year for all cases closed rehabilitated in that year.
3. Multiplying the cells of Table 4 by the corresponding cells of the state's Form R-311 on earnings at closure yields a state income tax at closure of \$72,033 per year for all cases closed rehabilitated in that year.

4. Subtracting step 2 result from step 3 result --

\$72,033 minus \$6,035 equals \$65,998 per year increase in the amount of state income tax being paid by the rehabilitated persons.

5. Since approximately \$1,113,113 was spent in state funds on rehabilitation services, 5.9% of it will be returned in one year through the increase in state income tax payments alone.

Assumptions made in the setup of the table in step 1 included:

1. Persons with zero dependents used individual return.
2. Persons with one or more dependents used joint return.
3. No allowances were made for persons over 65 years old or blind exemptions.
4. The earnings of the rehabilitated client were the only income for the family.

Annual Decrease in Public Assistance Payment from State Funds

The total decrease in the amount of state funds expended in Public Assistance payments to persons rehabilitated was determined by subtracting the amount of state funds paid in public assistance to these persons at closure from the amount of state public assistance paid to these persons at acceptance.

Sources of information used were:

R-302 Part 3 -- Number of rehabilitations, grouped by public assistance received at acceptance, and at closure.

Source of Funds Expended for Public Assistance Payment, Calendar Year Ending December 31, 1965. Welfare Administration Bureau of Family Services -- Table on Special types of public assistance; Expenditures for assistance to recipients, by source of funds, calendar year ended December 31, 1965.

Method:

1. Based on information in the above table, our sample state contributed 45.4% of all assistance payments to recipients. The Federal government paid the remainder.
2. From the state's Form R-302 Part 3, line 3 and line 5, at acceptance, \$330,000 per year was being paid in public assistance payments with federal funds.

45.4% x \$330,000 equals \$149,820 state and local funds for public assistance at acceptance.
3. From the state's Form R-302 Part 3, line 4, at acceptance an additional \$19,488 was being paid in public assistance payments from totally state and local funds.
4. The total state and local share of public assistance at acceptance was \$169,308.
5. From the state's Form R-302 Part 3 line 17 and line 19, at closure \$33,588 per year was being paid in public assistance payments with federal funds.

45.4% x \$33,588 equals \$15,249 state funds for public assistance at closure.
6. From the state's Form R-302 Part 3 line 18, at closure an additional \$1,968 was being paid in public assistance payments from totally state and local funds.
7. The total state and local share of public assistance at closure was \$17,217.

8. Subtracting the result in step 7 from the result of step 4 the savings in the state and local revenue were:

\$169,308 minus \$17,217 equals \$152,091 annual savings to the state in Public Assistance payments to persons rehabilitated in a single year.

9. This savings of \$152,091 is about 13.7% of the \$1,113,113 that the state expended on the entire VR program in the year under consideration.

Annual Decrease in State Funds Spent on Rehabilitated Clients in
Tax-Supported Institutions

At the time of acceptance 297 persons were primarily supported by public institutions, tax-supported. All of these persons were assumed to be no longer supported by this source at the time of rehabilitation closure. The decrease in state funds necessary to support these persons could then be determined.

Sources of information used were:

Mental Health Statistics--Current Reports, Series MHB-H-10
January 1966, page 8.

R-302 Part 2, Number of rehabilitations grouped by primary source
of support at acceptance.

Method:

1. Using the R-302 Part 2 it was determined that 297 persons were in the group supported by tax-supported institutions.
2. A recent study of the mentally ill indicated that most clients, whose primary source of support at acceptance was a tax supported institution, were in mental hospitals.
3. The assumption was made that the cost of support of the persons in institutions other than mental institutions did not vary significantly from the cost of those within mental institutions.
4. Using table 1 of the Mental Health Statistics--Current Reports, the sample state was shown to spend \$14.83 per patient day within mental hospitals. This is a rate of \$5,413 per year per patient.
5. Multiplying \$5,413 times 297 patients gives a total annual rate of savings of \$1,607,661.
6. This saving of \$1,607,661 is about 144% of the \$1,113,113 that the state expended on the entire VR program in the state under consideration.

Man-Hours Contributed by Persons Rehabilitated

The total increase in the number of man-hours worked by rehabilitated persons was determined by subtracting the estimated number of man-hours worked at acceptance from the estimated number of man-hours worked at the time of closure.

Source of information used was:

VRA Form R-302, Part 4, Number of rehabilitants, grouped by work status at acceptance and at closure.

Method:

1. Of all clients rehabilitated only 191 were wage or salaried workers, self-employed or working in the Business Enterprise Program at the time of acceptance. It was estimated that each of these persons contributed approximately 2,000 hours per year.

$191 \times 2,000$ equals 382,000 hours

2. Of all clients rehabilitated 1,804 were wage or salaried workers, self-employed or working in the Business Enterprise Program at the time of closure. It was estimated that each of these persons contributed approximately 2,000 hours per year.

$1,804 \times 2,000$ equals 3,608,000 hours

3. The result of step 2 is then subtracted from the result of step 1. This will give the increase in man-hours contributed due to rehabilitation.

$3,608,000$ minus $382,000$ equals 3,226,000 man-hours

Loss in the Number of Persons Rehabilitated Due to Failure to use
Entire Allotment of Federal Funds

In fiscal years 1963, 1964, 1965, and 1966 only 65 percent, 61 percent, 55 percent, and 51 percent, respectively, of the Federal allotment was used. The cause of this was insufficient state funds being provided. If all of the allotment had been used during each of these years and if the same cost per rehabilitation ratio had existed, then the states would have rehabilitated 394,404 more persons in these four years.

35/65 x 110,136 equals	59,304 added rehabilitations in 1963
39/61 x 119,708 equals	76,534 added rehabilitations in 1964
45/55 x 134,859 equals	110,338 added rehabilitations in 1965
49/51 x 154,279 equals	<u>148,228</u> added rehabilitations in 1966
	394,404 added rehabilitations in the four years

If these persons had been successfully rehabilitated, then the economic benefits of their rehabilitation would have manifested themselves in increased state taxes and lower state payments through public assistance and tax-supported institutions.

INTRODUCTION TO FACTORS INVOLVED IN THE ESTIMATE OF INCREASED LIFETIME
EARNINGS DUE TO VR SERVICES PER DOLLAR OF VR EXPENDITURE

This subject is admittedly rather complex, involving a great many details and assumptions that are best left in the hands of economic and statistical analysts.

Nonetheless, a brief presentation of some of the elements compounded within this kind of estimating should provide a general understanding of what this estimate is and what it is trying to do.

Broadly speaking, there are three major factors that make up the estimate of the increase in lifetime earnings due to VR per dollar of ^{1/}VR expenditure for clients closed rehabilitated in any one given fiscal year. These factors are a) the estimated lifetime earnings of rehabilitated clients, based on their earnings at closure, b) the estimated lifetime earnings of these same clients if they had never received VR services (or, what they could have earned without the benefit of VR service,) and c) for all cases closed in the same fiscal year the actual cost of case services plus an estimated amount of expenditures for counseling, guidance, administrative and other costs.

The first factor starts with the earnings at closure for all clients rehabilitated in a given year and projects these earnings over the estimated number of years that these clients will continue to work. In estimating the sum total of lifetime earnings, death rates must be accounted for and estimates made of how many persons are expected to become disabled again. Additionally, an estimate must be made for those clients who will increase their productivity through the years with resulting increases in wages. Conversely, consideration must also be given to the likelihood that the value of the dollar through the years will decline.

The second factor, the amount of wages that could have been earned even without VR services, consists of two parts: a) the estimated lifetime earnings of rehabilitated clients based on their earnings at acceptance, and b) the estimated lifetime earnings of rehabilitated clients without earnings at acceptance who would have found earnings eventually even without the help of VR services.

The same components used in making an estimate of the first factor will be repeated here, namely, consideration of how long these clients might go on with their earnings, death rates, disability rates, increased productivity and the changing value of the dollar.

This second major factor represents earnings for which VR cannot properly take credit and, therefore, they will have to be subtracted from the estimate of lifetime earnings based on earnings at closure. The result of this subtraction if referred to as the increased lifetime earnings due to VR.

1/ Theoretically, clients closed not rehabilitated in the same fiscal year should be included in this classification but have been excluded from the following illustration in order to simplify both the assumptions and the calculations.

Once this lifetime increase in earnings has been estimated, it must be evaluated in terms of the total cost involved in the rendering of services to these clients. This evaluation is made by dividing the total increased earnings by the total cost incurred in making possible these increased earnings. The total cost figures include the cost of case services, the cost of administration, guidance, and counseling for the entire period of the rehabilitation process, and must include the cases closed not rehabilitated as well as those rehabilitated.

To illustrate the relationship between these three basic factors let us follow a simplified analysis. Assume that there were only six closures in a given year--five rehabilitations and one non-rehabilitation. Also, assume that the five rehabilitated clients were earning \$80 a week at closure, or about \$4,000 a year. The total annual wages of these five persons would then be \$20,000.

If only one of these five had earnings at acceptance, and if these earnings were \$40 a week, or \$2,000 a year, then \$2,000 is the first adjustment to the \$20,000 figure that must be made. After subtraction we are left with \$18,000. Additionally, if one of the remaining four non-wage-earners at acceptance would have been able to earn wages even without the help of VR and if these presumed earnings would also have been \$2,000 a year, then we have another value to be subtracted from the \$20,000 figure. After subtraction we are left with \$16,000.

Finally, if the total expense of rehabilitating these five persons was \$4,000 and another \$1,000 was spent on the person who could not be rehabilitated, then the increased earnings due to VR services for the first year would be \$3.20 for each dollar of expenditure (\$16,000 divided by \$5,000).

If we carry this illustration out for another year, we find that certain complications enter the picture. For example, the \$4,000 yearly salary of the rehabilitated clients may now have an economic value of \$3,800. On the other hand, the workers may have received raises because of increased production amounting to \$150 a year. Thus, the net value of their earnings in the second year after rehabilitation closure is now \$3,950. If one of the five rehabilitated clients became disabled again at the beginning of the second year and could no longer work, then the remaining four clients would earn wages valued at \$15,800. (\$3,950 for each)

At this point, let us return to the two clients whom we previously considered able to earn some wages without the benefit of VR services. For the sake of simplicity, it is now assumed that neither of these two persons could have continued receiving wages for another year without help from VR. Therefore, the total earnings figure of \$15,800 will also be the net increase in earnings in the second year due to VR services. Adding this to the first year's net increase of \$16,000 yields \$31,800 as the two-year increase in earnings attributable to VR. This total is divided by the stated cost of \$5,000 resulting in \$6.36 as the two-year increase in earnings due to VR services.

This procedure should be carried out for each year in turn for which benefits are to be computed in order to complete the estimate of the lifetime increase in earnings per dollar of VR expenditures.

APPENDIX A

Agenda for the Statistical Seminar
San Francisco, California

November 28, 1966

9:00-10:00	Welcoming Address Mr. Philip Schafer
	Keynote Address Mr. Sigmund Schor
10:00-10:30	Introduction to and organization of the seminar and seminar materials Mr. Wesley R. Grier
10:30-10:45	Break
10:45-11:45	The referral caseload, the writing of plans, and the active caseload Mr. Lawrence Mars
11:45- 1:15	Lunch
1:15- 2:30	Workshop groups and discussion leaders Group A - <u>Terrence James</u> Group B - <u>J. N. Gibson</u>
2:30- 2:45	Break
2:45- 3:30	Workshop group reports and general review
3:30- 4:30	Sharing of statistical data and new techniques within the region - ways and means Walter J. Harris and Carl Rennowitz

November 29, 1966

8:30- 9:00	Duration of the rehabilitation process, closures without service, and historical relationships Lawrence Mars and Howard Oberheu
9:00-10:00	Workshop groups and discussion leaders Group A - <u>Michael M. Guariglia</u> Group B - <u>Stanley Merrill</u>

10:00-10:15	Break
10:15-10:45	Workshop group reports and general review
10:45-11:30	Processed referrals and active caseload closures analyzed by referral sources and major disabling conditions Lawrence Mars
11:30- 1:00	Lunch
1:00- 2:00	Workshop groups and discussion leaders Group A - <u>Philip Stoker</u> Group B - <u>Harry Lucas</u>
2:00- 2:30	Workshop group reports and general review
2:30- 2:45	Break
2:45- 3:45	Measurement of the economic benefits of rehabilitation Emmett C. Dye, Jr. and Lawrence Mars
3:45- 4:30	Summary review by selected participants <u>November 30, 1966</u>
8:30- 9:30	The Form R-300 reporting system Wesley R. Grier
9:00-10:00	General discussion - the new reporting system
10:00-10:15	Break
10:15-11:30	General discussion continued
11:30- 1:00	Lunch
1:00-	Division of Statistics and Studies open house - Staff members will be available for small workshop discussions, individual problem discussions, etc.

List of Participants

Vocational Rehabilitation
State Agencies:

Alaska Carroll M. Craft
Henrietta Sofoulis

Arizona William T. Carey
M. J. Curry
George Fortuny
Mary Trail*

California Milton Anagnost
Irving Atlas
Harry Lucas
Stanley Merrill
Robert Moody
Philip Stoker
Donald W. Stonum
Bud Stude
Richard Wooten

Guam R. W. Corbridge

Hawaii Elizabeth H. Morrison
Kuniji Sagara
Aiko Tatsuno*

Nevada Michael M. Guariglia
John B. Lee
Robert McMillan
Maynard Yasmer

Oregon Charles Brown
Terrence James
Clarence Mellbye
Luis Morales
Carl Rennewitz

* Denotes Miss

Washington Donald C. Crawford
John A. Elder
J. N. Gibson
Donald P. Holden
E. M. Oliver
M. C. Smart

Vocational Rehabilitation Administration Edward L. Chouinard
Emmett C. Dye, Jr.
Wesley R. Grier
Walter J. Harris
Lawrence I. Mars
Howard D. Oberheu
Philip Schafer
Sigmund Schor
Dale C. Williamson

APPENDIX B

Table 1.--Processed, unprocessed, and new referral/applicants - State and districts, July 1 to December 31

State and districts	Referral/applicant load										Processed since June 30				New since June 30			
	Total status 04-06 since June 30		To status 10 since June 30		To status 08 since June 30		Remaining Dec. 31		Total status 00&02		Total Month-ly avg. rate"10" (No.)		Back-log status 00 avg. (No.)		Total Month-ly avg. (No.)			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)		
	a	b	c	d	e	f	g	h	i	j	k							
State	5,237	551	11	1,834	35	2,143	41	709	14	4,528	755	40	.9	3,119	520	60		
L. st. I	2,151	223	10	628	29	1,044	49	256	12	1,895	316	33	.8	1,057	176	49		
Dist. II	1,570	173	11	668	43	512	33	217	14	1,353	225	49	1.0	1,016	169	65		
Dist. III	1,516	155	10	538	35	587	39	236	16	1,280	213	42	1.1	1,046	174	69		
State average	1,746	184	11	611	35	714	41	236	14	1,509	251	40	.9	1,040	173	60		

- a Col. 2 + Col. 4 + Col. 6 + Col. 8
- b Col. 2 ÷ Col. 1
- c Col. 4 ÷ Col. 1
- d Col. 6 ÷ Col. 1
- e Col. 8 ÷ Col. 1
- f Col. 2 + Col. 4 + Col. 6
- g Col. 10 ÷ 6
- h Col. 4 ÷ Col. 10
- i Col. 8 ÷ Col. 11
- j Col. 14 ÷ 6
- k Col. 14 ÷ Col. 1

Table 1A.--Processed, unprocessed, and new referral/applicants - District I and counselors -
July 1 to December 31

Dist. I and counselors	Referral/applicant load										Processed since June 30					New since June 30		
	Total status 04-06 since 10 since 08 since June 30		To status 10 since 08 since June 30		Remaining Dec. 31 00&02 June 30		Total status 00&02 June 30		Month-ly avg. rate"10" (No.)		Accept-ance rate"10" (%)		Back-log status 00 avg. (No.)		Total status 00 avg. (No.)		Month-ly total load	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
	a	b	c	d	e	f	g	h	i	j	k							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)			
Dist. I	2,151	223	10	628	29	1,044	49	256	12	1,895	316	33	.8	1,057	176	49		
01	275	20	7	48	17	173	63	34	12	241	40	20	.9	118	20	42		
02	228	35	15	72	32	100	44	21	9	207	35	35	.6	146	24	64		
03	233	35	15	91	39	73	31	34	15	199	33	46	1.0	132	22	57		
10	409	30	7	96	23	222	54	61	15	348	58	28	1.1	189	32	46		
11	389	71	18	151	39	126	32	41	11	348	58	43	.7	159	27	41		
15	241	10	4	93	39	109	45	29	12	212	35	44	.8	166	28	69		
18	376	22	6	77	20	241	64	36	10	340	57	23	.6	147	25	39		
Dist. I average	307	32	10	90	29	149	49	37	12	271	45	33	.8	151	25	49		

a Col. 2 + Col. 4 + Col. 6 + Col. 8 e Col. 8 ÷ Col. 1. i Col. 8 ÷ Col. 11

b Col. 2 ÷ Col. 1 f Col. 2 + Col. 4 + Col. 6 j Col. 14 ÷ 6

c Col. 4 ÷ Col. 1 g Col. 10 ÷ 6 k Col. 14 ÷ Col. 1

d Col. 6 ÷ Col. 1 h Col. 4 ÷ Col. 10

Table 1B.--Processed, unprocessed, and new referral/applicants - District II and counselors -
July 1 to December 31

Dist. II and counselors	Referral/applicant load										Processed since June 30					New since June 30						
	Total status 04-06 since 00&02 June 30		To status since 10 June 30		To status since 08 June 30		Remaining Dec. 31		Total status 00&02 June 30		Month- ly avg. (No.)		Accept- ance rate"10" (%)		Back- log status 00 avg. (No.)		Total status 00 avg. (No.)		Month- ly total load (16)			
	No. %		No. %		No. %		No. %		No. %		No. %		No. %		No. %		No. %		No. %			
	a	(1)	b	(2)	c	(3)	d	(4)	e	(5)	f	(6)	g	(7)	h	(8)	i	(9)	j	(10)	k	(11)
Dist. II	1,570	173	11	668	43	512	33	217	14	1,353	226	49	1.0	1,016	169	65						
07	219	20	9	106	48	47	21	46	21	173	29	61	1.6	134	22	61						
14	210	23	11	70	33	101	48	16	8	194	32	36	.5	74	12	35						
16	171	16	9	112	65	27	16	16	9	155	26	72	.6	75	13	44						
19	341	31	9	121	35	158	46	31	9	310	52	39	.6	199	33	58						
22	249	27	11	108	43	71	29	43	17	206	34	52	1.3	169	28	68						
23	203	26	13	72	35	62	31	43	21	160	27	45	1.6	192	32	95						
31	177	30	17	79	45	46	26	22	12	155	26	41	.8	173	29	98						
Dist. II average	224	25	11	95	42	73	33	31	14	193	32	49	1.0	145	24	65						
a	Col. 2 + Col. 4 + Col. 6 + Col. 8										Col. 8 ÷ Col. 1.		Col. 8 ÷ Col. 1.		Col. 8 ÷ Col. 11							
b	Col. 2 ÷ Col. 1										Col. 2 + Col. 4 + Col. 6		Col. 2 + Col. 4 + Col. 6		Col. 14 ÷ 6							
c	Col. 4 ÷ Col. 1.										Col. 10 ÷ 6		Col. 10 ÷ 6		Col. 14 ÷ Col. 1							
d	Col. 6 ÷ Col. 1										Col. 4 ÷ Col. 10		Col. 4 ÷ Col. 10									

Table 1C.--Processed, unprocessed, and new referral/applicants - District III and counselors -
July 1 to December 31

Dist. III and counselors	Referral/applicant load										Processed since June 30					New since June 30		
	Total status 04-06 since 00&02		To status June 30		To status June 30		To status June 30		Remaining Dec. 31		Total status 00&02		Month- ly avg. rate"10"		Back- log status 00		Total Month- ly avg. load	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	(No.)	(%)	(No.)	(%)	(No.)	(%)
	a	b	c	d	e	f	g	h	i	j	k							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)		
Dist. III	1,516	155	10	538	35	587	39	236	16	1,280	213	42	1.1	1,046	174	69		
04	86	8	9	52	60	19	22	7	8	79	13	66	.5	58	10	67		
05	280	24	9	122	44	89	32	45	16	235	39	52	1.2	200	33	71		
09	158	14	9	56	35	61	39	27	17	131	22	43	1.2	117	20	74		
12	180	12	7	61	34	59	33	48	27	132	22	46	2.2	98	16	54		
13	236	40	17	94	40	57	24	45	19	191	32	49	1.4	167	28	71		
17	261	19	7	70	27	148	57	24	9	237	40	30	.6	188	31	72		
20	315	38	12	83	26	154	49	40	13	275	46	30	.9	218	36	69		
Dist. III average	217	22	10	77	35	84	39	34	16	183	30	42	1.1	149	25	69		

a Col. 2 + Col. 4 + Col. 6 + Col. 8 e Col. 8 ÷ Col. 1 i Col. 8 ÷ Col. 11

b Col. 2 ÷ Col. 1 f Col. 2 + Col. 4 + Col. 6 j Col. 14 ÷ 5

c Col. 4 ÷ Col. 1 g Col. 10 ÷ 6 k Col. 14 ÷ Col. 1

d Col. 6 ÷ Col. 1 h Col. 4 ÷ Col. 10

Table 2.--Number of months to elimination of referral/applicant backlog at current processing and development rates - State and districts - December 31

State and districts	Status 00 & 02 on hand Dec. 31 (1)	Monthly processing rate (2)	New referrals developed monthly (3)	Number of months to a zero backlog	
				Col. (1)	Col. (2)-(3) (4)
State	709	755	520		3.0
District I	256	316	176		1.8
District II	217	225	169		3.9
District III	236	213	174		6.1
State average	236	251	173		3.0

Table 2A.--Number of months to elimination of referral/applicant backlog at current processing and development rates - District I and counselors - December 31

District I and counselors	Status 00 & 02 on hand Dec. 31 (1)	Monthly processing rate (2)	New referrals developed monthly (3)	Number of months to a zero backlog	
				Col. (1)	Col. (2)-(3) (4)
District I	256	316	176		1.8
01	34	40	20		1.7
02	21	35	24		1.9
03	34	33	22		3.1
10	61	58	32		2.3
11	41	58	27		1.3
15	29	35	28		4.1
18	36	57	25		1.1
District I average	37	45	25		1.8

Table 2B.--Number of months to elimination of referral/applicant backlog at current processing and development rates - District II and counselors - December 31

District II and counselors	Status 00 & 02 on hand Dec. 31 (1)	Monthly processing rate (2)	New referrals developed monthly (3)	Number of months to a zero backlog	
				Col. (1)	Col. (2)-(3) (4)
District II	217	226	169		3.8
07	46	29	22		6.6
14	16	32	12		.8
16	16	26	13		1.2
19	31	52	33		1.6
22	43	34	28		7.2
23	43	27	32		No limit
31	22	26	29		No limit
District II average	31	32	24		3.9

Table 2C.--Number of months to elimination of referral/applicant backlog at current processing and development rates - District III and counselors - December 31

District III , and counselors	Status - 00 & 02 on hand Dec. 31 (1)	Monthly processing rate (2)	New referrals developed monthly (3)	Number of months to a zero backlog	
				Col. (1)	Col. (2)-(3) (4)
District III	236	213	174		6.1
04	7	13	10		2.3
05	45	39	33		7.5
09	27	22	20		13.5
12	48	22	16		8.0
13	45	32	28		11.2
17	24	40	31		2.7
20	40	46	36		4.0
District III average	34	30	25		6.8

Table 3.--Writing of plans - State and districts - July 1 to December 31

State and districts	Total plans to be written		Plans written since June 30		Backlog of plans to be written	Months of backlog at average rate
	June 30 to December 31		Monthly average			
	(1)	(2)	(3)	(4) ^a	(5) ^b	
State	2,843	2,441	407	402	1.0	
District I	969	830	138	139	1.0	
District II	997	856	143	141	1.0	
District III	877	755	126	122	1.0	
State average	948	814	136	134	1.0	

^aCol. 1 less col. 2

^bCol. 4 ÷ col. 3

Table 3A--Writing of plans - District I and counselors - July 1 to December 31

District I and counselors	Total plans to be written		Plans written since June 30		Backlog of plans to be written	Months of backlog at average rate
	(1)	(2)	(3)	(4) ^a		(5) ^b
District I	969	830	138	139		1.0
01	79	75	12	4		.3
02	150	69	11	81		7.4
03	133	128	21	5		.2
10	120	114	19	6		.3
11	245	237	39	8		.2
15	128	95	16	32		2.0
18	114	111	18	3		.2
District I average	138	119	20	20		1.0

^aCol. 1 less col. 2

^bCol. 4 ÷ col. 3

Table 3B--Writing of plans - District II and counselors - July 1 to December 31

District II and counselors	Plans written since June 30		Backlog of plans to be written	Months of backlog at average rate
	Total to be written June 30 to December 31 (1)	Monthly average written (2)		
District II	997	856	143	1.0
07	159	158	26	1
14	106	104	17	2
16	146	128	21	18
19	173	150	25	23
22	149	148	25	1
23	133	90	15	43
31	131	78	13	53
District II average	142	122	20	20

^aCol. 1 less col. 2

^bCol. 4 ÷ col. 3

Table 3C--Writing of plans - District III and counselors - July 1 to December 31

District III and counselors	Total plans to be written		Plans written since June 30		Backlog of plans to be written	Months backlog at average rate
	June 30 to December 31 (1)	December 31 (2)	Monthly average (3)	Monthly average (4) ^a		
District III	877	755	126	122		1.0
04	73	73	12	0		.0
05	175	144	24	31		1.3
09	95	87	14	8		.6
12	85	83	14	2		.1
13	167	136	23	31		1.3
17	133	118	20	15		.8
20	149	114	19	35		1.8
District III average	125	108	18	17		1.0

^aCol. 1 less col. 2

^bCol. 4 ÷ col. 3

Table 4.--Distribution of total caseload in active status and cases closed from active status -
State and districts - July 1 to December 31

State and districts	Active caseload, December 31										Closures ^{a/}									
	Total caseload			Number active in EE and in case services, Closed ^{a/} (08,26, 28,30)	Statuses by percent of total							Number closed (08,26, 28,30)	Statutes by percent of total closures							
	Number in EE and case services, active and closed	Percent	Active		(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
State	5,833	36.1	63.9	3,730	6	14	35	9	30	6	2,103	9	67	8	16					
Dist. I	2,133	38.1	61.9	1,321	5	14	36	14	25	6	812	12	60	9	19					
Dist. II	1,840	29.3	70.7	1,301	7	15	34	8	29	7	539	8	79	5	8					
Dist. III	1,860	40.4	59.6	1,108	7	12	35	6	37	3	752	8	64	9	19					
State average	1,944	36.1	63.9	1,243	6	14	35	9	30	6	701	9	67	8	16					

^{a/} Includes 08 closures from 04 and 06 only.

Table 4A--Distribution of total caseload in active status and cases closed from active status -
District I and counselors - July 1 to December 31

Dist. I and counselors	Total caseload		Active caseload, December 31								Closures ^{a/}				
	Number in EE and case services, active and closed	Percent	Statuses by percent of total								Number				
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13) (14) (15)
Dist. I	2,133	38.1	61.9	1,321	5	14	36	14	20	22	24	24	26	28	30
01	204	50.0	50.0	102	10	9	55	8	13	5	102	19	57	17	7
02	366	39.3	60.7	222	2	40	23	25	8	2	144	3	56	1	40
03	296	24.0	76.0	225	3	5	36	20	33	3	71	8	91	1	--
10	270	49.6	50.4	136	9	12	40	13	20	6	134	16	51	15	18
11	339	35.1	64.9	220	7	9	28	7	29	20	119	15	70	6	9
15	323	39.6	60.4	195	5	17	53	1	22	2	128	3	63	11	23
18	335	34.0	66.0	221	5	6	32	17	38	2	114	18	51	11	20
Dist. I average	305	38.0	62.0	189	5	14	37	14	24	6	116	12	60	9	19

a/ Includes 08 closures from 04 and 06 only.

Table 4g--Distribution of total caseload in active status and cases closed from active status -
District II and counselors - July 1 to December 31

Dist. II and counselors	Active caseload, December 31															Closures ^{a/}					
	Total caseload				Statuses by percent of total											Number closed of total closures					
	Number in EE and case services, active and closed	Percent	Closed ^{a/} (08,26, 28,30)	Active and in case services	Number active in EE												Number closed of total closures				
						04-06	10-12	14-18	20	22	24	(08,26, 28,30)	08	26	28	30					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)							
Dist. II	1,840	29.3	70.7	1,301	7	15	35	8	28	7	539	8	79	5	8						
07	284	29.9	70.1	199	6	4	51	5	26	8	85	1	85	8	6						
14	252	24.6	75.4	190	6	1	32	11	34	16	62	11	59	19	11						
16	194	36.1	63.9	124	6	15	47	6	24	2	70	13	81	3	3						
19	325	35.4	64.6	210	8	17	24	1	47	3	115	5	87	5	3						
22	217	20.3	79.7	173	10	5	22	16	40	7	44	14	84	--	2						
23	312	29.5	70.5	220	7	25	39	8	17	4	92	8	78	--	14						
31	256	27.7	72.3	185	4	36	30	11	10	9	71	8	75	1	16						
Dist. II average	263	29.3	70.7	186	6	15	34	9	28	8	77	8	79	5	8						

a/ Includes 08 closures from 04 and 06 only.

Table 4C--Distribution of total caseload in active status and cases closed from active status -
District III and counselors - July 1 to December 31

Dist. III and counselors	Total caseload		Active caseload, December 31										Closures ^{a/}			
	Number in EE and case services, active and closed (1)	Percent Closed ^{a/} (08,26, 28,30)	Statuses by percent of total										Number Statuses by percent closed of total closures			
			(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Dist. III	1,860	40.4	59.6		1,108	8	12	35	5	37	3	752	8	64	9	19
04	154	37.7	62.3		96	3	3	33	2	55	4	58	--	97	3	--
05	273	30.8	69.2		189	3	17	37	5	35	3	84	11	89	--	--
09	251	47.0	53.0		133	9	7	39	1	41	3	118	8	48	11	33
12	239	44.8	55.2		132	8	2	39	5	46	--	107	2	84	7	7
13	387	45.2	54.8		212	7	15	32	7	36	3	175	11	43	16	30
17	247	41.7	58.3		144	9	13	42	10	25	1	103	7	68	9	16
20	309	34.6	65.4		202	11	18	27	6	32	6	107	12	55	7	25
Dist. III average	265	40.4	59.6		158	8	12	35	5	37	3	107	7	65	9	13

^{a/} Includes 08 closures from 04 and 06 only.

Table 5--Percent of active cases closed, by type of closure, within stated amounts of time, by district, July 1 to December 31

	Cumulative percent Total closures			Cumulative percent Status 08 ^a closures			Cumulative percent Status 26 closures			Cumulative percent Status 28 closures			Cumulative percent Status 30 closures		
	Dist.			Dist.			Dist.			Dist.			Dist.		
	I	II	III	I	II	III	I	II	III	I	II	III	I	II	III
Total	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
closures	812	539	752	95	42	59	491	426	433	73	28	68	153	43	142

Months from intake date to closure:	0- 3	4- 6	7- 9	10-12	13-15	16-18	19-21	22-24	25-30	31-36	37-42	43-48	49-60	61-72	73-84	84 +
	2	12	19	30	40	52	59	62	75	81	86	91	95	96	96	100
	3	13	29	43	57	68	75	82	83	90	95	96	98	99	100	--
	1	4	8	29	45	62	73	74	82	91	92	94	96	98	98	100
	18	61	68	80	93	100	--	--	--	--	--	--	--	--	--	--
	24	67	67	74	83	100	--	--	--	--	--	--	--	--	--	--
	8	53	56	63	71	100	--	--	--	--	--	--	--	--	--	--
	--	8	17	31	42	58	66	71	81	90	95	97	98	100	--	--
	1	10	26	43	57	68	75	76	86	92	97	99	99	99	100	--
	--	--	4	27	46	62	76	78	86	93	93	95	98	99	99	100
	--	4	7	10	19	28	39	44	56	65	71	78	84	90	93	100
	--	5	16	29	41	57	64	68	73	76	82	88	90	93	99	100
	--	--	3	17	32	52	60	65	72	74	80	86	89	91	94	100
	--	5	9	13	24	36	48	52	64	69	78	85	87	92	94	100
	1	7	24	40	54	65	71	73	79	87	91	94	96	98	100	--
	--	1	5	25	43	59	74	77	85	90	93	95	97	98	99	100

^aClosures status 08 from 04 and 06 only.

Table 6--Closures "without service" other than guidance and counseling^{a/}
and total referral/applicants processed -- State and districts
July 1 to December 31

State and districts	Total referral/ applicants processed	Total closed "without service" as percent of referrals processed ^{b/}	Closures "without service"		
			Total (4)+(5)	Status 08 From 00 and 02	In Status 30 ^{c/}
	(1)	(2)	(3)	(4)	(5)
State	4,528	54	2,448	2,143	305
District I	1,895	62	1,182	1,044	138
District II	1,353	41	551	512	39
District III	1,280	56	715	587	128
State average	1,509	54	816	714	102

^{a/} This concept combines closures in status 08 from 00 and 02 with closures in Status 30 (closures after acceptance but before service is initiated).

^{b/} Col. 3 ÷ Col. 1

^{c/} Adjusted down 10% to allow for those cases that received Extended Evaluation.

Table 6A--Closures "without service" other than guidance and counseling^{a/}
and total referral/applicants processed -- District I and
counselors ~ July 1 to December 31

District I and counselors	Total referral/ applicants processed	Total closed "without service" as percent of referrals processed ^{b/}	Closures "without service"		
			Total (4)+(5)	Status 08 From 00 and 02	In Status 30 ^{c/}
	(1)	(2)	(3)	(4)	(5)
District I	1,895	62	1,182	1,044	138
01	241	74	179	173	6
02	207	73	152	100	52
03	199	37	73	73	0
10	348	70	244	222	22
11	348	39	136	126	10
15	212	64	136	109	27
18	340	77	262	241	21
District I average	271	62	169	149	20

^{a/} This concept combines closures in status 08 and from 00 and 02 with closures in Status 30 (closures after acceptance but before service is initiated).

^{b/} Col. 3 ÷ Col. 1

^{c/} Adjusted down 10% to allow for those cases that received Extended Evaluation.

Table 6B--Closures "without service" other than guidance and counseling^{a/}
and total referral/applicants processed -- District II and
counselors - July 1 to December 31

District II and counselors	Total referral/ applicants processed	Total closed "without service" as percent of referrals processed ^{b/}	Closures "without service"		
			Total (4)+(5)	Status 08 From 00 and 02	In Status 30 ^{c/}
	(1)	(2)	(3)	(4)	(5)
District II	1,353	41	551	512	39
27	173	29	51	47	4
14	194	55	107	101	6
16	155	19	29	27	2
19	310	52	162	158	4
22	206	35	72	71	1
23	160	46	74	62	12
31	155	36	56	46	10
District II average	193	41	79	73	6

^{a/} This concept combines closures in status 08 and from 00 and 02 with closures in Status 30 (closures after acceptance but before service is initiated).

^{b/} Col. 3 ÷ Col. 1

^{c/} Adjusted down 10% to allow for those cases that received Extended Evaluations.

Table 6C--Closures "without service" other than guidance and counseling^{a/}
and total referral/applicant processed -- District III and
counselors July 1 to December 31

District III and counselors	Total referral/ applicants processed	Total closed "without service" as percent of referrals processed ^{b/}	Closures "without service"		
			Total (4)+(5)	Status 08 From 00 and 02	In Status 30 ^{c/}
	(1)	(2)	(3)	(4)	(5)
District III	1,280	56	715	587	127
04	79	24	19	19	0
05	235	38	89	89	0
09	131	73	96	61	35
12	132	49	65	59	6
13	191	54	104	57	47
17	237	69	163	148	15
20	275	65	178	154	24
District III average	183	56	102	84	18

^{a/} This concept combines closures in status 08 from 00 and 02 with closures in Status 30 (closures after acceptance but before service is initiated).

^{b/} Col. 3 ÷ Col. 1

^{c/} Adjusted down 10% to allow for those cases that received Extended Evaluation.

Table 7--Historical caseload relationships, fiscal years 1961-1966 and estimates of caseload for fiscal years 1967-1968

Fiscal year	Total referrals	Accepted for service	Ratio of referrals to acceptances	Total** active caseload	Ratio of referrals to active caseload	Closed status 26	Ratio of referrals to closures status 26	Ratio of active cases to closures status 26
	(1)	(2)	(3) ^a	(4)	(5) ^b	(6)	(7) ^c	(8) ^d
1966	19,522	6,974	2.80	14,294	1.37	4,155	4.70	3.44
1955	16,826	5,254	3.20	12,520	1.34	3,601	4.67	3.40
1964	15,996	5,108	3.13	11,083	1.44	3,263	4.90	3.40
1953	12,266	4,161	2.95	9,499	1.29	2,746	4.47	3.46
1962	12,193	4,144	2.94	8,196	1.49	2,380	5.12	3.44
1961	10,998	3,172	3.47	6,461	1.70	2,008	5.48	3.22
ESTIMATE 1967	21,518	7,800	2.76	16,530	1.30	6,530	3.30	2.53
ESTIMATE 1968	25,718	8,700	2.96	18,670	1.38	7,700	3.34	2.42

^a Col. 1 - col. 2

^b Col. 1 - col. 4

^c Col. 1 - col. 6

^d Col. 4 - col. 6

** Excluded from the active caseload are those cases in Extended Evaluation.

Table 8A.--PERCENT OF EACH DISTRICT'S PROCESSED REFERRALS ACCEPTED FOR SERVICES
BY EACH SOURCE OF REFERRAL
JULY 1, 1965 - DECEMBER 31, 1965

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
State and District	All	: Educational:Hospitals: : Welfare : Another : Self- : Other															
	Sources	: Inst. :and Sant.:Physicians: BOASI : Agency : Person :Referred :Source															
	Tot. : %	:Tot. : % :Tot. : % :Tot. : % :Tot. : % :Tot. : % :Tot. : %															
	proc. :acc.	:proc.:acc. :proc.:acc.:proc.:acc.:proc.:acc.:proc.:acc.:proc.:acc.:proc.:acc.:proc.:acc.															
TOTAL	4,834	52	790	53	789	52	774	69	511	29	640	45	534	51	520	50	278 57
REFERRALS---																	
District I ---	2,031	44	208	24	274	34	403	76	208	17	312	30	255	51	274	50	97 48
District II --	1,424	61	394	69	275	67	196	69	145	29	150	59	126	56	133	56	95 67
District III -	1,379	53	278	57	240	55	173	54	158	45	178	60	153	48	113	44	86 56

Acc.--Accepted for services.

Proc.--Processed referrals.

Table 8B.--PERCENT OF REFERRAL'S ACCEPTED AND REJECTED REFERRALS
ACCOUNTED FOR BY EACH DISTRICT
JULY 1, 1965 - DECEMBER 31, 1965

State and District	1 : 2 : 3 : 4 : 5 : 6 : 7 : 8 : 9 : 10 : 11 : 12 : 13 : 14 : 15 : 16 : 17 : 18																	
	All : Educational:Hospitals: Physicians: Welfare : Another : Self- : Other																	
	Sources : Inst. :and Sant.: BOASI : Agency : Person : Referred: Sources																	
	Acc. : Rej. :Acc. : Rej. :Acc. :Rej. :Acc. :Rej. :Acc. :Rej. :Acc. :Rej. :Acc. :Rej. :Acc. :Rej. :Acc. :Rej.																	
TOTAL	2,495	2,339	420	370	409	380	535	237	148	363	288	352	274	260	262	258	159	119
REFERRALS --																		
District I ---	36%	49%	12%	43%	22%	48%	57%	41%	24%	48%	33%	62%	48%	48%	52%	53%	30%	42%
District II --	35%	24%	50%	25%	45%	24%	26%	25%	28%	28%	29%	18%	25%	21%	29%	23%	40%	26%
District III -	29%	27%	38%	32%	33%	28%	17%	34%	48%	24%	37%	20%	27%	31%	19%	24%	30%	32%

Acc.--Accepted for services.
Rej.--Rejected for services.

Table 8C.--PERCENT OF A DISTRICT'S ACCEPTED AND REJECTED REFERRALS
COMING FROM EACH SOURCE OF REFERRAL
JULY 1, 1965 - DECEMBER 31, 1965

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
State	All Sources: Educational: Hospitals: Physicians: BOASI : Welfare : Another : Self- : Other																	
and	(Number) : Inst. : and Sant. : Agency : Person : Referred: Sources																	
District	Acc.: Rej. :Acc. :Rej. :Acc.:Rej. :Acc.:Rej. :Acc.:Rej.:Acc.:Rej.:Acc.:Rej.:Acc.:Rej.																	
TOTAL	2,495	2,339	17%	16%	16%	16%	21%	10%	6%	16%	12%	15%	11%	11%	11%	6%	5%	
REFERRALS --																		
District I ---	892	1,139	6%	14%	10%	16%	34%	9%	4%	15%	11%	19%	15%	11%	15%	12%	5%	4%
District II --	870	554	24%	17%	21%	16%	16%	11%	5%	19%	10%	11%	8%	10%	9%	10%	7%	6%
District III -	733	646	22%	18%	18%	17%	13%	12%	10%	14%	14%	11%	10%	12%	7%	10%	6%	6%

Acc.--Accepted for services.

Rej.--Rejected for services.

Table 9A.--PERCENT OF EACH DISTRICT'S CLOSURES REHABILITATED BY EACH SOURCE OF REFERRAL
JULY 1, 1965 - DECEMBER 31, 1965

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
State and District	All Sources	Educational:Hospitals: Physicians: BOASI																	
		Inst.		and Sant.		Physicians:		BOASI		Welfare		Another		Self-		Other			
		Total:Percent:	Tot.	%	Tot.	%	Tot.	%	Tot.	%	Tot.	%	Tot.	%	Tot.	%	Tot.	%	
		Clos.: Reh.	Clos.	Reh.	Clos.	Reh.	Clos.	Reh.	Clos.	Reh.	Clos.	Reh.	Clos.	Reh.	Clos.	Reh.	Clos.	Reh.	
TOTAL	CLOSURES ---	1,907	73	303	72	243	77	328	88	125	70	261	65	213	69	266	73	168	65
District I ---	717	68	71	59	67	61	176	76	40	55	79	51	100	68	128	73	56	64	
District II --	497	86	93	90	73	90	81	93	24	79	72	85	50	76	59	85	45	73	
District III -	693	70	139	66	103	78	71	86	61	77	110	62	63	70	79	65	67	60	

Reh.--case closed, rehabilitated.
Clos.---Closures.

Table 9B. ---PERCENT OF EACH SOURCE OF REFERRAL'S REHABILITATED AND NON-REHABILITATED CLOSURES
ACCOUNTED FOR BY EACH DISTRICT
JULY 1, 1965 - DECEMBER 31, 1965

State and District	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	All : Educational:Hospitals: Physicians: BOASI : Welfare : Another : Self- : Other																	
	Sources : : Inst. : and Sant.: : Agency : Person :Referred : Sources																	
	Reh. : Non. :Reh. : Non. :Reh. : Non. :Reh. : Non. :Reh. : Non. :Reh. : Non. :Reh. : Non. :Reh. : Non. :Reh. : Non. :Reh. : Non.																	
TOTAL CLOSURES --	1,400	507	218	85	187	56	287	41	88	37	169	92	148	65	194	72	109	59
District I ---	35%	45%	19%	34%	22%	46%	53%	61%	25%	49%	24%	42%	44%	52%	48%	49%	33%	34%
District II --	30%	14%	39%	11%	35%	13%	26%	15%	22%	13%	36%	12%	26%	19%	26%	12%	30%	20%
District III -	35%	41%	42%	55%	43%	41%	21%	24%	53%	38%	40%	45%	30%	29%	26%	39%	37%	46%

Reh. ---Case closed, rehabilitated.
Non. ---Case closed, not rehabilitated.

Table 9C.--PERCENT OF A DISTRICT'S REHABILITATED AND NON-REHABILITATED CLOSURES
COMING FROM EACH SOURCE OF REFERRAL
JULY 1, 1965 - DECEMBER 31, 1965

State and District	1 : 2 : 3 : 4 : 5 : 6 : 7 : 8 : 9 : 10 : 11 : 12 : 13 : 14 : 15 : 16 : 17 : 18																	
	All Sources: Educational: Hospitals: Physicians: BOASI : Welfare : Another : Self- : Other																	
	(Number) : Inst. : and Sant.: Agency : Person : Referred : Sources																	
	Reh. : Non.: Reh. : Non.: Reh. : Non.: Reh. : Non.: Reh. : Non.: Reh. : Non.: Reh. : Non.: Reh. : Non.: Reh. : Non.																	
TOTAL CLOSURES ---	1,400	507	16%	17%	13%	11%	20%	8%	6%	7%	12%	18%	11%	13%	14%	14%	8%	12%
District I ---	491	226	9%	13%	8%	12%	31%	11%	5%	8%	8%	17%	13%	15%	19%	15%	7%	9%
District II --	426	71	20%	13%	15%	10%	18%	8%	4%	7%	14%	15%	9%	17%	12%	13%	8%	17%
District III -	483	210	19%	22%	17%	11%	13%	5%	10%	7%	14%	20%	9%	9%	10%	13%	8%	13%

Reh. --Case closed, rehabilitated.
Non. ---Case closed, not rehabilitated.

**TABLE 10A--PERCENT OF EACH DISTRICT'S PROCESSED REFERRALS ACCEPTED
FOR SERVICES BY EACH MAJOR DISABLING CONDITION
JULY 1, 1965 - DECEMBER 31, 1965**

	1	2:3	4:5	6:7	8:9	10:11	12:13	14:15	16::17	18								
State and District		:	:Orthopedic:Blindness:Deafness:Mental	:Mental	:Cardiac	:Other												
	All Conditions:Amputations:Impairments:Visual:Hearing:	:& Other	:Illness	:Retardation:Disease	:Conditions													
	Total % Acc:Total % Acc:Total % Acc:Total % Acc:Total % Acc:Total % Acc	:Proc	:Proc	:Proc	:Proc	:Proc	:Proc	:Proc	:Proc									
TOTAL REFERRALS	4834	52	434	61	1453	58	220	56	243	62	140	47	545	43	436	39	363	46
DISTRICT I	2031	44	169	53	573	65	90	42	86	55	429	34	278	27	198	22	208	40
DISTRICT II	1424	61	125	72	439	55	59	68	75	72	396	59	127	71	133	58	70	59
DISTRICT III	1379	53	140	59	441	54	71	63	82	60	315	49	140	52	105	49	85	49

Proc.- Processed referrals
Acc. - Accepted for services

TABLE 10B--PERCENT OF EACH MAJOR DISABLING CONDITION'S ACCEPTED AND REJECTED
REFERRALS ACCOUNTED FOR BY EACH DISTRICT
JULY 1, 1965 - DECEMBER 31, 1965

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
State	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
and	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
District	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Acc	:	Rej	:	Acc	:	Rej	:	Acc	:	Rej	:	Acc	:	Rej	:	Acc	:
TOTAL																	
REFERRALS	2495	2339	266	168	850	603	123	97	150	93	532	608	237	308	171	265	166
DISTRICT I	36%	49%	33%	48%	44%	33%	31%	54%	31%	42%	27%	47%	31%	66%	25%	59%	50%
DISTRICT II	35%	24%	36%	18%	28%	33%	32%	19%	36%	23%	44%	27%	38%	12%	45%	21%	25%
DISTRICT III	29%	27%	31%	34%	28%	34%	37%	27%	33%	35%	29%	26%	31%	22%	30%	20%	25%

Acc. - Accepted for services
Rej. - Rejected for services

TABLE 10C--PERCENT OF A DISTRICT'S ACCEPTED AND REJECTED REFERRALS
WITH EACH MAJOR DISABLING CONDITION
JULY 1, 1965 - DECEMBER 31, 1965

Stat- and District	1		2:3		4:5		6:7		8:9		10:11		12:13		14:15		16:17		18
	All Conditions: (Number)		Amputations: :ments		Orthopedic: :ments		Blindness: :ments		Deafness: :ments		Mental: :ments		Mental: :ments		Cardiac: :ments		Other: :ments		
	Acc	Rej	Acc	Rej	Acc	Rej	Acc	Rej	Acc	Rej	Acc	Rej	Acc	Rej	Acc	Rej	Acc	Rej	
TOTAL	2495	2339	11%	7%	34%	26%	5%	4%	6%	4%	21%	26%	9%	13%	7%	11%	7%	9%	
DISTRICT I	892	1139	10%	7%	42%	18%	4%	4%	5%	3%	17%	25%	8%	18%	5%	14%	9%	11%	
DISTRICT II	870	554	11%	5%	28%	36%	4%	3%	6%	4%	27%	30%	10%	7%	9%	10%	5%	5%	
DISTRICT III	733	646	11%	9%	32%	32%	6%	4%	7%	5%	21%	25%	10%	10%	7%	8%	6%	7%	

Acc. - Accepted for services
Rej. - Rejected for services

Table 11A. --PERCENT OF A DISTRICT'S CLOSURES REHABILITATED BY EACH
MAJOR DISABLING CONDITION
JULY 1, 1965 - DECEMBER 31, 1965

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
State and District	All																		
	Conditions :																		
	Total : Percent :																		
	Clos. : Reh.																		
TOTAL CLOSURES -		1,907	73%	223	81%	581	76%	100	76%	101	80%	350	71%	238	66%	173	69%	139	70%
District I -		717	68%	65	74%	294	84%	32	63%	35	71%	126	46%	101	51%	33	67%	29	69%
District II		497	86%	69	91%	128	72%	24	100%	27	93%	98	94%	57	86%	53	87%	41	85%
District III		693	70%	89	78%	159	64%	44	73%	39	79%	126	79%	80	71%	87	60%	69	61%
Reh.--case closed, rehabilitated Clos.--closures.																			

**Reh.--case closed, rehabilitated
Clos.--closures.**

Table 11B.--PERCENT OF EACH MAJOR DISABLING CONDITION'S REHABILITATED AND
NON REHABILITATED CLOSURES ACCOUNTED FOR BY EACH DISTRICT
JULY 1, 1965 - DECEMBER 31, 1965

State and District	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	: : : : : : : : : : : : : : : : : :																	
	: : : : : : : : : : : : : : : : : :																	
	: : : : : : : : : : : : : : : : : :																	
All	: : : : : : : : : : : : : : : : : :																	
Amputations:	: : : : : : : : : : : : : : : : : :																	
Orthopedic:	: : : : : : : : : : : : : : : : : :																	
Blindness:	: : : : : : : : : : : : : : : : : :																	
Deafness:	: : : : : : : : : : : : : : : : : :																	
Other:	: : : : : : : : : : : : : : : : : :																	
Cardiac:	: : : : : : : : : : : : : : : : : :																	
Disease:	: : : : : : : : : : : : : : : : : :																	
Conditions:	: : : : : : : : : : : : : : : : : :																	
Reh.:	: : : : : : : : : : : : : : : : : :																	
Non.:	: : : : : : : : : : : : : : : : : :																	
Reh.:	: : : : : : : : : : : : : : : : : :																	
Non.:	: : : : : : : : : : : : : : : : : :																	
Reh.:	: : : : : : : : : : : : : : : : : :																	
Non.:	: : : : : : : : : : : : : : : : : :																	
TOTAL	1,400	507	180	43	439	142	76	24	81	20	249	101	158	80	120	53	97	42
District I	35%	45%	27%	40%	56%	34%	26%	50%	31%	50%	23%	67%	33%	61%	18%	21%	21%	22%
District II	30%	14%	35%	14%	21%	25%	32%	--	31%	10%	37%	6%	31%	10%	38%	13%	36%	14%
District III	35%	41%	38%	47%	23%	41%	42%	50%	38%	40%	40%	27%	36%	29%	44%	66%	43%	64%

Reh.--Case closed, rehabilitated.
Non.--Case closed, not rehabilitated.

Table 11C.--PERCENT OF A DISTRICT'S REHABILITATED AND NON REHABILITATED CLOSURES
WITH EACH MAJOR DISABLING CONDITION
JULY 1, 1965 - DECEMBER 31, 1965

State and District	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	All																	
	Conditions : Amputations:																	
	(Number)																	
	Reh. : Non.:	Reh. :	Non.:	Reh. :	Non.:	Reh. :	Non.:	Reh. :	Non.:	Reh. :	Non.:	Reh. :	Non.:	Reh. :	Non.:	Reh. :	Non.:	Reh. :
	Reh. :	Non.:	Reh. :	Non.:	Reh. :	Non.:	Reh. :	Non.:	Reh. :	Non.:	Reh. :	Non.:	Reh. :	Non.:	Reh. :	Non.:	Reh. :	Non.:
TOTAL																		
CLOSURES -	1,400	505	13%	9%	31%	28%	5%	5%	6%	4%	18%	20%	11%	16%	9%	10%	7%	8%
District I -	491	224	10%	8%	50%	21%	4%	5%	5%	5%	12%	30%	11%	22%	4%	5%	4%	4%
District II	426	71	15%	8%	22%	51%	5%	0	6%	3%	22%	8%	11%	12%	11%	10%	8%	8%
District III	483	210	14%	9%	21%	28%	7%	6%	6%	4%	20%	13%	12%	11%	11%	16%	9%	13%

Reh.--Case closed, rehabilitated.
Non.--Case closed, not rehabilitated.

